



# **TS-119 Turbo NAS**

## **User Manual (Version: 2.3.0)**



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## FOREWORD

Thank you for choosing QNAP products! This user manual provides detailed instructions of using TS-119. Please read carefully and start to enjoy the powerful functions of TS-119!

## NOTE

- **"TS-119" is hereafter referred to as "TS-119" or "NAS".**
- This manual provides the description of all functions of TS-119. The product you purchased may not support certain functions dedicated to specific models.
- All features, functionality, and other product specifications are subject to change without prior notice or obligation.
- All brands and products names referred to are trademarks of their respective holders.

## LIMITED WARRANTY

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### CAUTION

1. Back up your system periodically to avoid any potential data loss. QNAP disclaims any responsibility of all sorts of data loss or recovery.
2. Should you return any components of the NAS package for refund or maintenance, make sure they are carefully packed for shipping. Any form of damages due to improper packaging will not be compensated.

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## **Safety Warning**

1. The NAS can operate normally in the temperature of 0°C-35°C and relative humidity of 0%-85%. Please make sure the environment is well-ventilated.
2. The power cord and devices connected to the NAS must provide correct supply voltage (36W, 90-264V).
3. Do not place the NAS in direct sunlight or near chemicals. Make sure the temperature and humidity of the environment are in optimized level.
4. Unplug the power cord and all connected cables before cleaning. Wipe the NAS with wet towel. Do not use chemical or aerosol to clean the NAS.
5. Do not place any objects on the NAS for the server's normal operation and to avoid overheat.
6. Use the flat head screws in the product package to fasten the hard disk in the NAS when installing hard disk for proper operation.
7. Do not place the NAS near any liquid.
8. Do not place the NAS on any uneven surface to avoid falling off and damage.
9. Make sure the voltage is correct in your location when using the NAS. If you are not sure, please contact the distributor or the local power supply company.
10. Do not place any object on the power cord.
11. Do not attempt to repair you're the NAS in any occasions. Improper disassembly of the product may expose you to electric shock or other risks. For any enquiries, please contact the distributor.

# Chapter 1 Overview

## 1.1 Introduction

Thank you for choosing QNAP NAS. This product supports the following key features:

✓ **File Server**

- Sharing files across Windows, Mac, Linux, and Unix
- Windows AD service

✓ **FTP Server**

- Support data access from remote location via FTP (max. 256 simultaneous connections)
- FTP with SSL/ TLS (explicit) mode
- FXP supported
- FTP bandwidth control and connection control
- Passive FTP port range control

✓ **Backup Server**

- QNAP client-side backup software -NetBak Replicator  
Supports instant, schedule, and auto-sync backup
- 3rd party backup software support: Acronis True Image, CA Brightstor, ARCserve Backup, EMC Retrospect, Symantec Backup Exec, LaCie Silverkeeper

✓ **Remote Replication**

- Back up critical data on QNAP NAS to other QNAP NAS in remote locations over the network.
- Encrypted remote replication
- Block-level backup

✓ **Printer Server**

- Network printer sharing via USB (support Windows & Mac platform)
- Support all-in-one printer (max. 3 sets)











- ✓ **Web Server**
  - Support Joomla!, PHP and MySQL/ SQLite
  - Create your own online shops, forums, and blogs over the Internet
- ✓ **MySQL Server**
  - MySQL and SQLite dual support
  - Can be configured as a standalone database server
  - Built-in MySQL management tool- phpMyAdmin
- ✓ **UPnP Media Server**
  - Built-in TwonkyMedia Server
  - Media streaming to DLNA compliant DMA, PS3 or Xbox 360 game consoles
  - Photos and videos playing on TV, and music and Internet radio playing on Hi-Fi system
- ✓ **iTunes Server**
  - Music streaming from NAS to the iTunes program on Mac or Windows PC
  - Smart playlist
- ✓ **Multimedia Station**
  - Photo sharing via web-based photo album.
  - Photo album access authority management
- ✓ **Download Station**
  - Support PC-less BitTorrent/ FTP/ HTTP download
  - QNAP remote download control software: QGet (Windows/ Mac), allows you to control the download tasks of multiple Turbo NAS on one PC via LAN/ WAN
  - BitTorrent download supports TCP/UDP, DHT
  - BT schedule download supported
  - Support BT tasks download (up to 500)
  - Download configuration (current seed number, configurable port range, bandwidth control, download percentage, UPnP NAT port forwarding for BitTorrent download)
  - Download status list management (download percentage)
  - Support access from Mac by Mozilla Firefox
- ✓ **Surveillance Station**
  - Remote real-time monitoring and recording of network cameras

- ✓ Diagnostic and Monitoring System: HDD S.M.A.R.T. and HHS Technology to prevent physical hard drive failure
- ✓ Powerful System Management: Comprehensive event logs for multiple file sharing protocols and file-level recordings

## 1.2 Package Contents

Your NAS package contains:

<p>✓ TS-119 Turbo NAS</p> 	<p>✓ Adaptor</p> 	<p>✓ Power cord</p> 
<p>✓ CD-ROM (user manual, Quick Install Wizard and software inclusive)</p> 	<p>✓ Quick Installation Guide</p> 	<p>✓ Screws</p> 
<p>✓ Ethernet cable</p> 	<p>✓ Stand x 2</p> 	

## 1.3 Hardware Illustration



1. One Touch Copy Button
2. USB 2.0
3. LED Indicators: USB, Status, HDD, eSATA, LAN, Power
4. Power Button
5. USB 2.0 x 2
6. eSATA Port
7. Giga LAN
8. Password & Network Settings Reset Button
9. Power Cord Hook
10. Power Connector
11. Kensington Security Slot

## Chapter 2 Install the NAS

### 2.1 Install Hard Disk

1. Pull out the front case of the NAS.



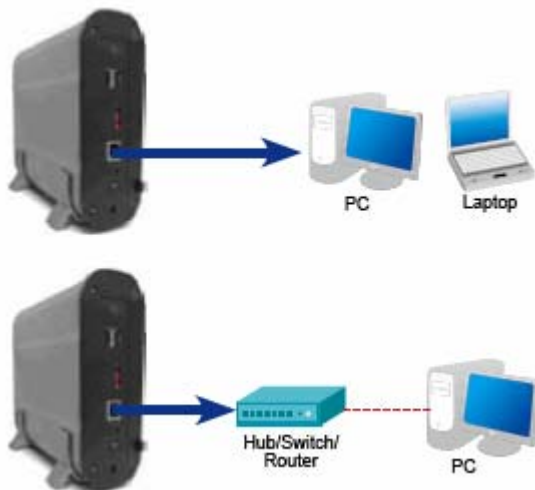
2. Install a hard disk on the drive plate of the NAS. Make sure the disk holes of the disk match the holes of drive plate. Lock the disk with the flat head screws.



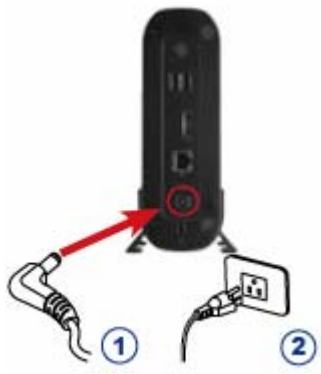
3. After installing the hard disk, cover the NAS with the front case and fasten the round head screws. Then place the NAS vertically on the stands.



4. Connect the network cable.



5. Connect the power cord and plug in the power cord to the socket.



6. Turn on the NAS. The server beeps once. Please wait for a while until the server beeps another time. The server has started up successfully.

## 2.2 Hard Disk Compatibility List

This product works with 3.5" SATA hard disk drives from major hard disk brands. For the HDD compatibility list, please visit <http://www.qnap.com/>.

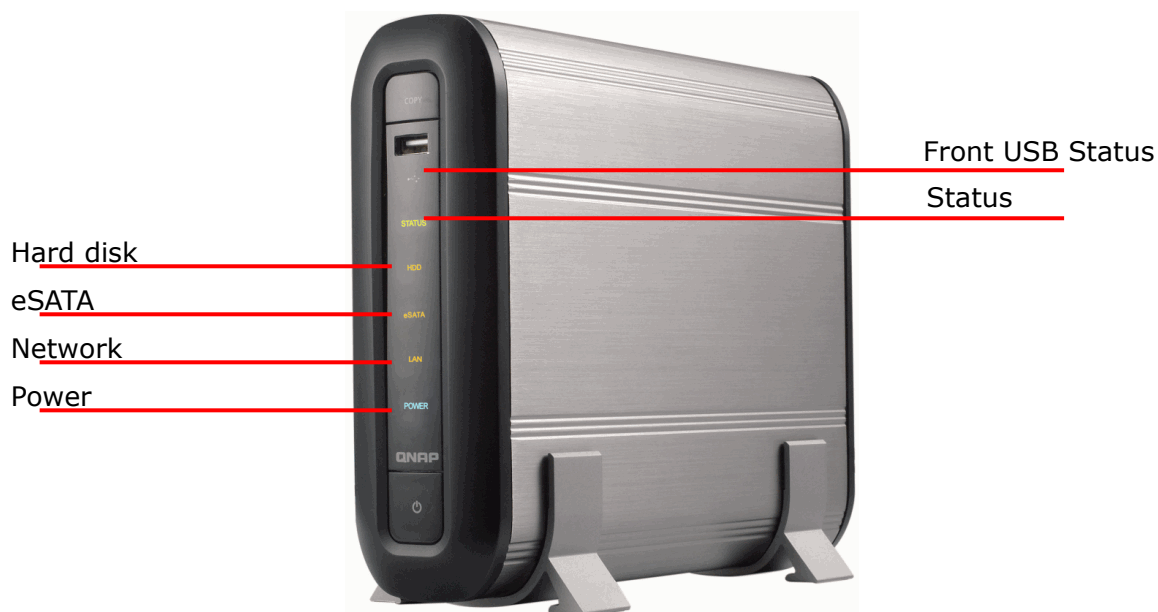


**QNAP disclaims any responsibility for product damage/ malfunction or data loss/ recovery due to misuse or improper installation of hard disks in any occasions for any reasons.**



## 2.3 Check System Status

The NAS provides LED indicators for you to indicate system status and information easily.



### LED Display & System Status Overview

LED	LED Display & System Status
Front USB Status	Blue: You can press the copy button to copy the data
	Flashes blue: The disk data is being accessed
Status	Green: The system is normal
	Flashes green: The hard disk is not detected or not initialized
	Red: Warning on disk full status; the disk capacity is almost full
	Flashes green and red alternatively: The firmware is being updated
HDD	Flashes orange: The disk data is being accessed
eSATA	Flashes orange: The disk data is being accessed
Network	Flashes orange: The disk data is being accessed
Power	Blue: The system is turned on
	Flashes blue: The firmware is being updated

Other Status			
Action	LED	Process	Finish
Update firmware	Power	Flashes blue	Blue
	Status	Flashes green and red alternatively	Green (long beep thrice)
System shut down	Power	Flashes blue	Off
	Status	Off (short beep once)	Off

## 2.4 NAS Quick Configuration (by QNAP Finder)

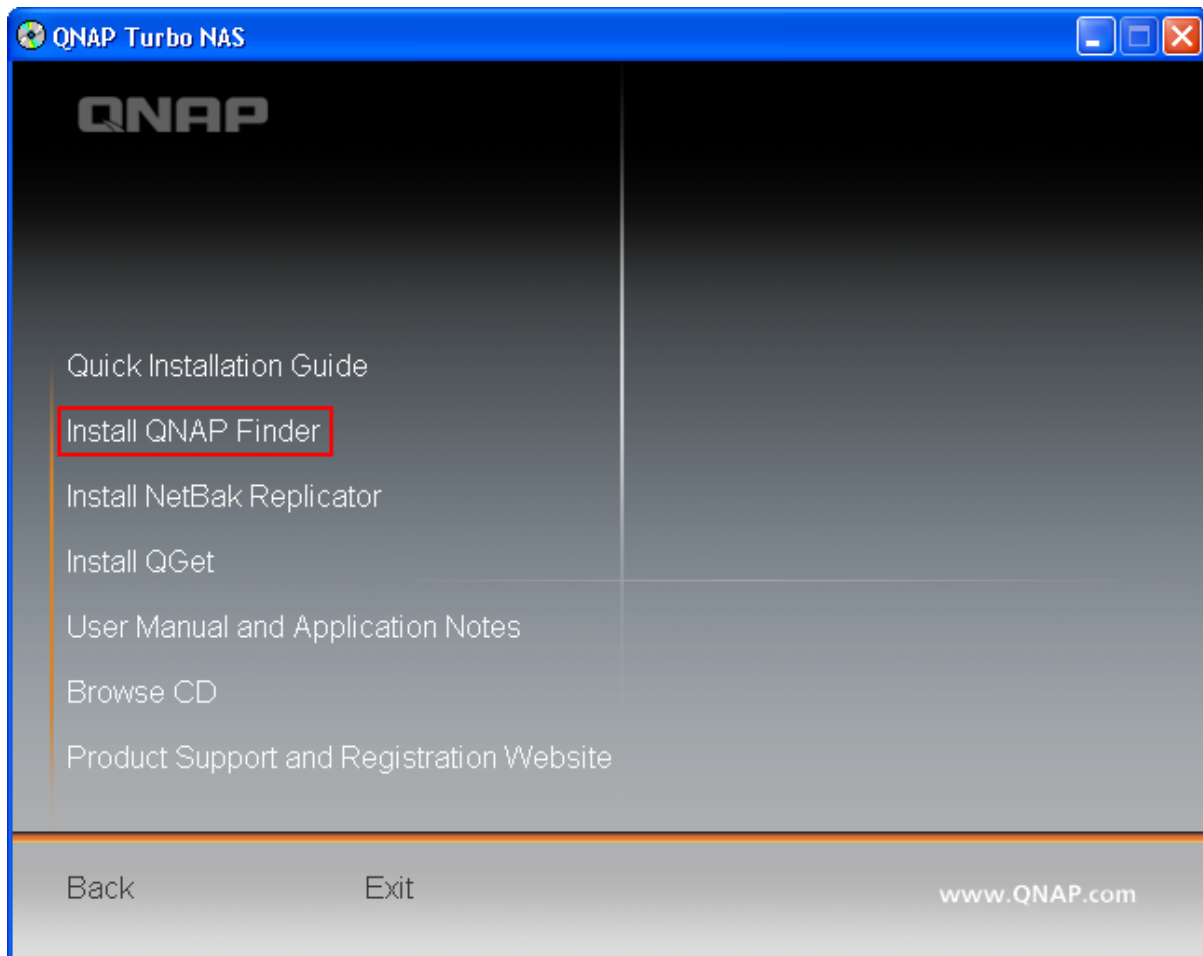
### 2.4.1 Windows® Users

Insert the NAS CD-ROM in your PC. Wait for a few seconds until the following screen shows up. Then start to configure the software settings of the NAS.

1. Execute the product CD, a menu is shown. Select your NAS model.



2. Click "Install QNAP Finder".

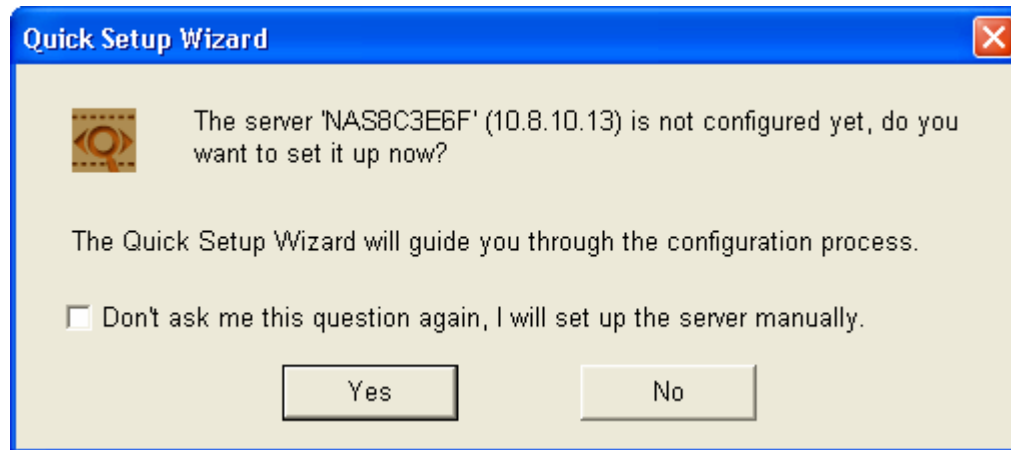


3. Follow the instructions to install QNAP Finder. QNAP Finder runs automatically. If you are using Windows XP SP2, the following screen will be shown. Click "Unblock".



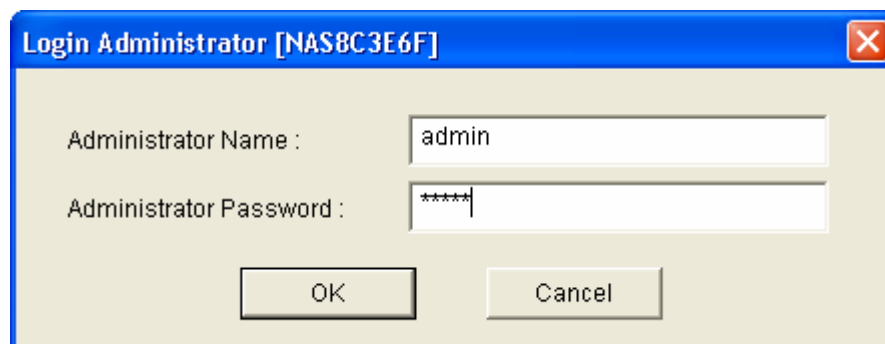
4. QNAP Finder will find the NAS available on the network and prompts to perform quick setup. Click "Yes" to continue.

**Note:** If the server is not found, click "Refresh" to try again.

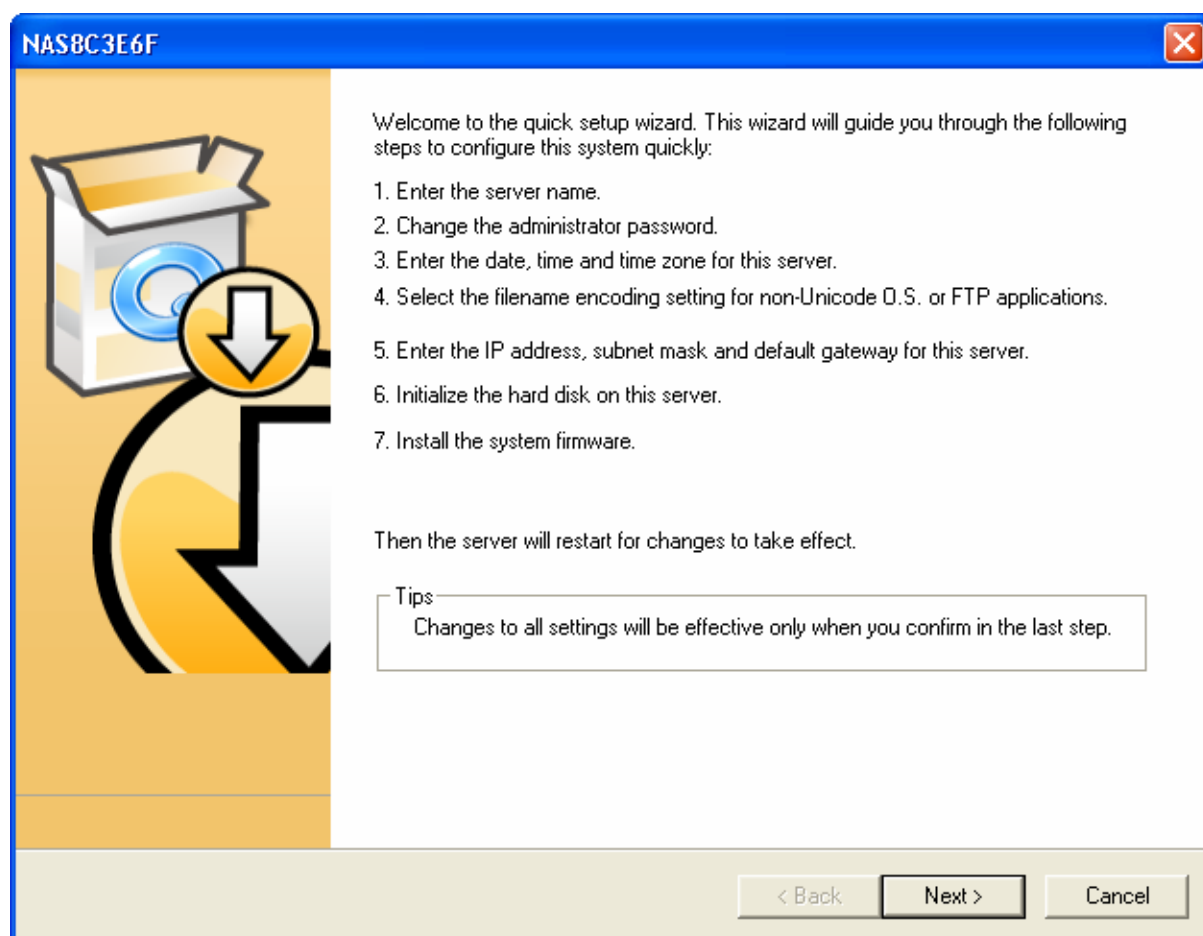


5. Enter the default user name and password.

Default user name: **admin**  
Password: **admin**

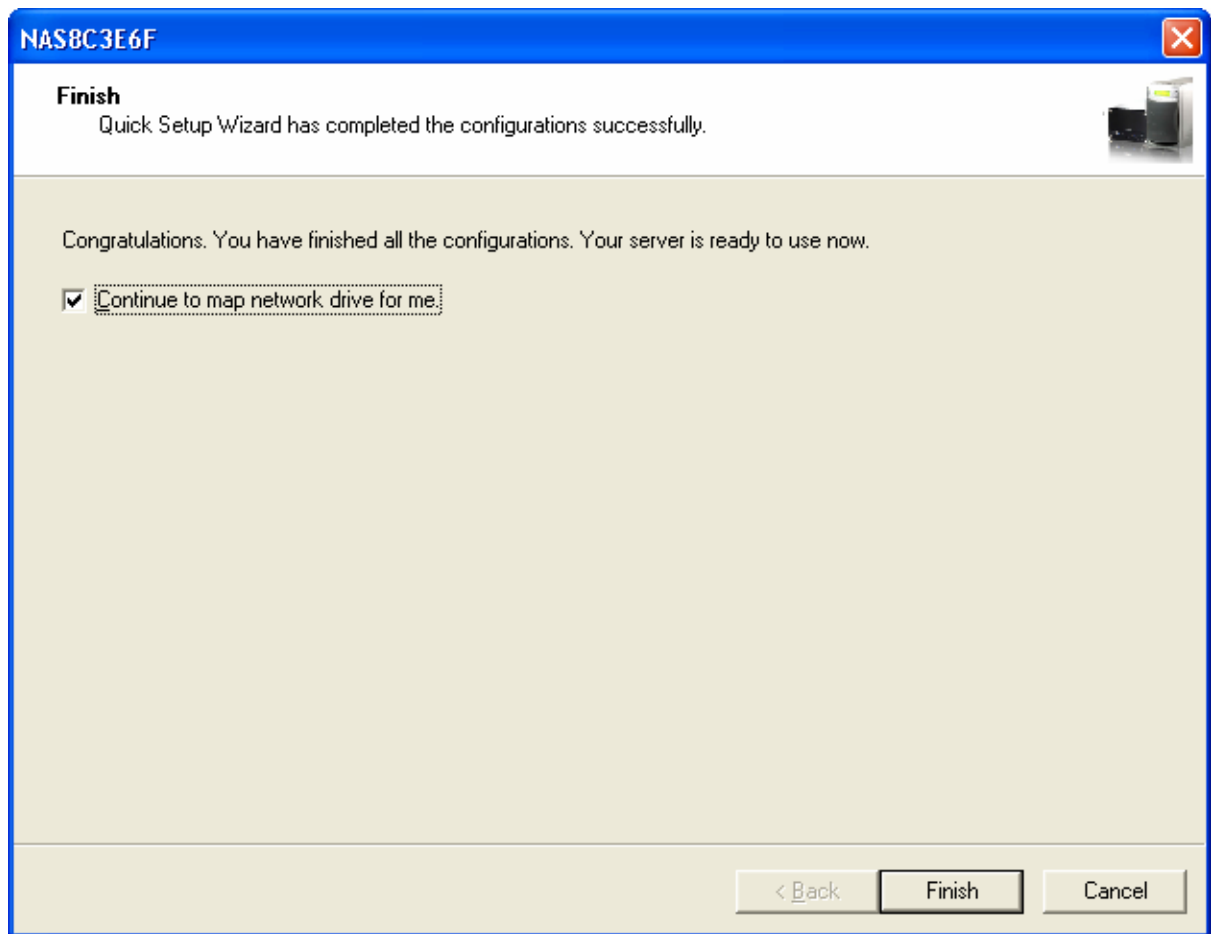


6. The first page of the Quick Setup Wizard will be shown. Click "Next" to continue and complete the configuration. Make sure you have installed a hard disk on the NAS.



**Note:** The configuration process may take up to twenty minutes if you are using a hard disk drive with capacity larger than 500GB.

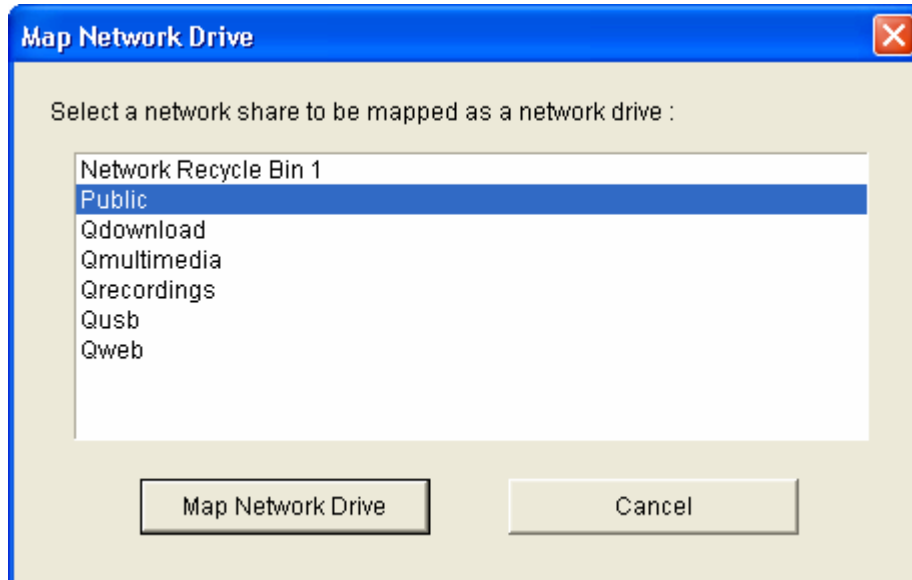
7. After the quick setup completes, click "Finish".



To map the share folder on the NAS as your network drive, check the option "Continue to map network drive for me" and proceed to the following steps.

## Map Network Drive

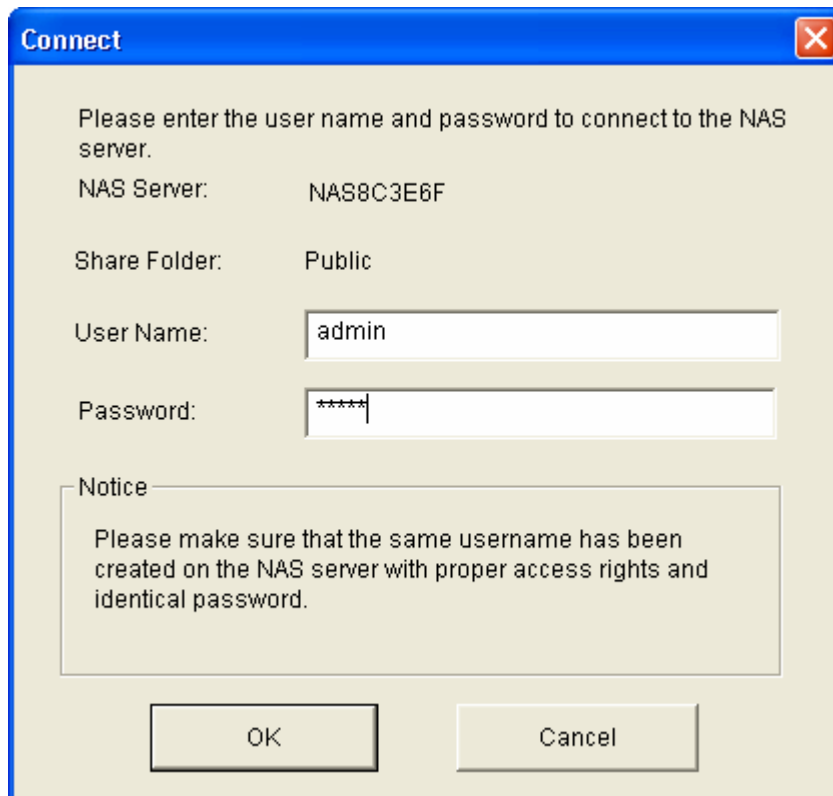
- a. The NAS provides several default network shares. Select the network share to map as network drive and click "Map Network Drive".



**Note:** Qdownload, Qmultimedia, Qusb, and Qweb are the default network shares for the use of Download Station, Multimedia Station, external USB storage device (auto-copy function) and Web Server respectively. Qrecordings is the default network share for the use of the Surveillance Station.



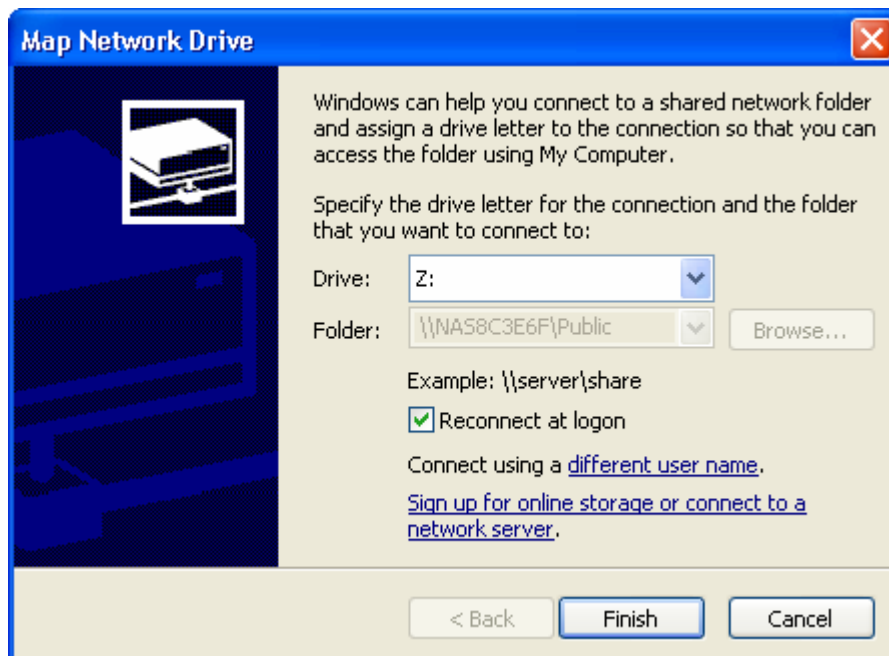
- b. Enter the default user name and password.



The 'Connect' dialog box has a blue title bar with a close button. The main area is light beige. It contains the following fields and text:

- Text: "Please enter the user name and password to connect to the NAS server."
- Field "NAS Server:" with value "NAS8C3E6F".
- Field "Share Folder:" with value "Public".
- Field "User Name:" with value "admin".
- Field "Password:" with masked characters "\*\*\*\*\*".
- Section "Notice" with text: "Please make sure that the same username has been created on the NAS server with proper access rights and identical password."
- Buttons "OK" and "Cancel" at the bottom.

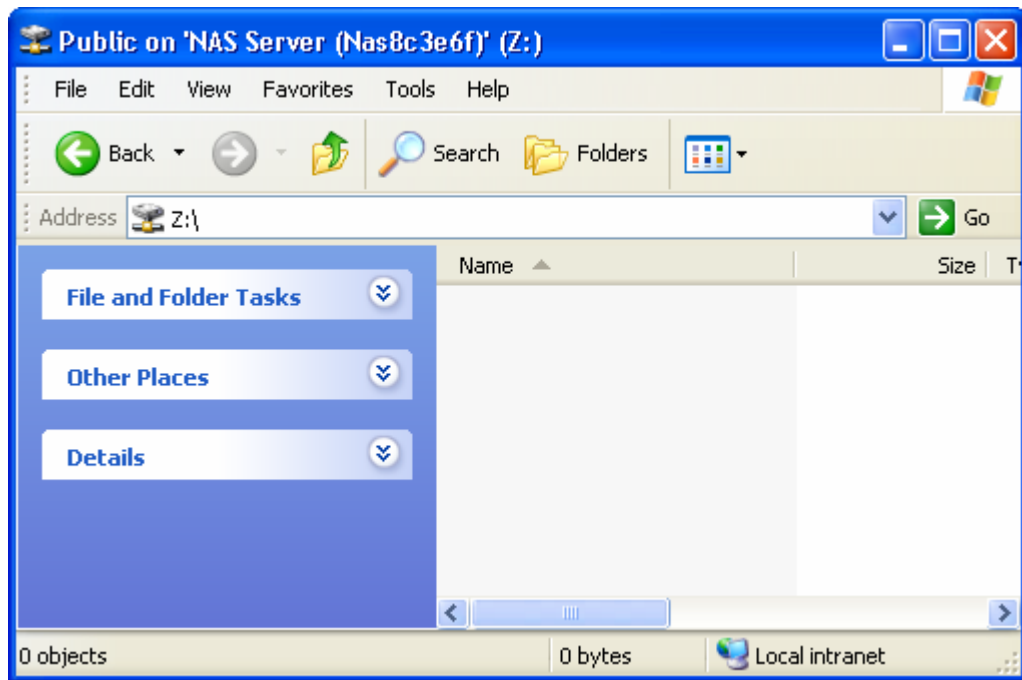
- c. Select the drive letter for the connection and click "Finish".



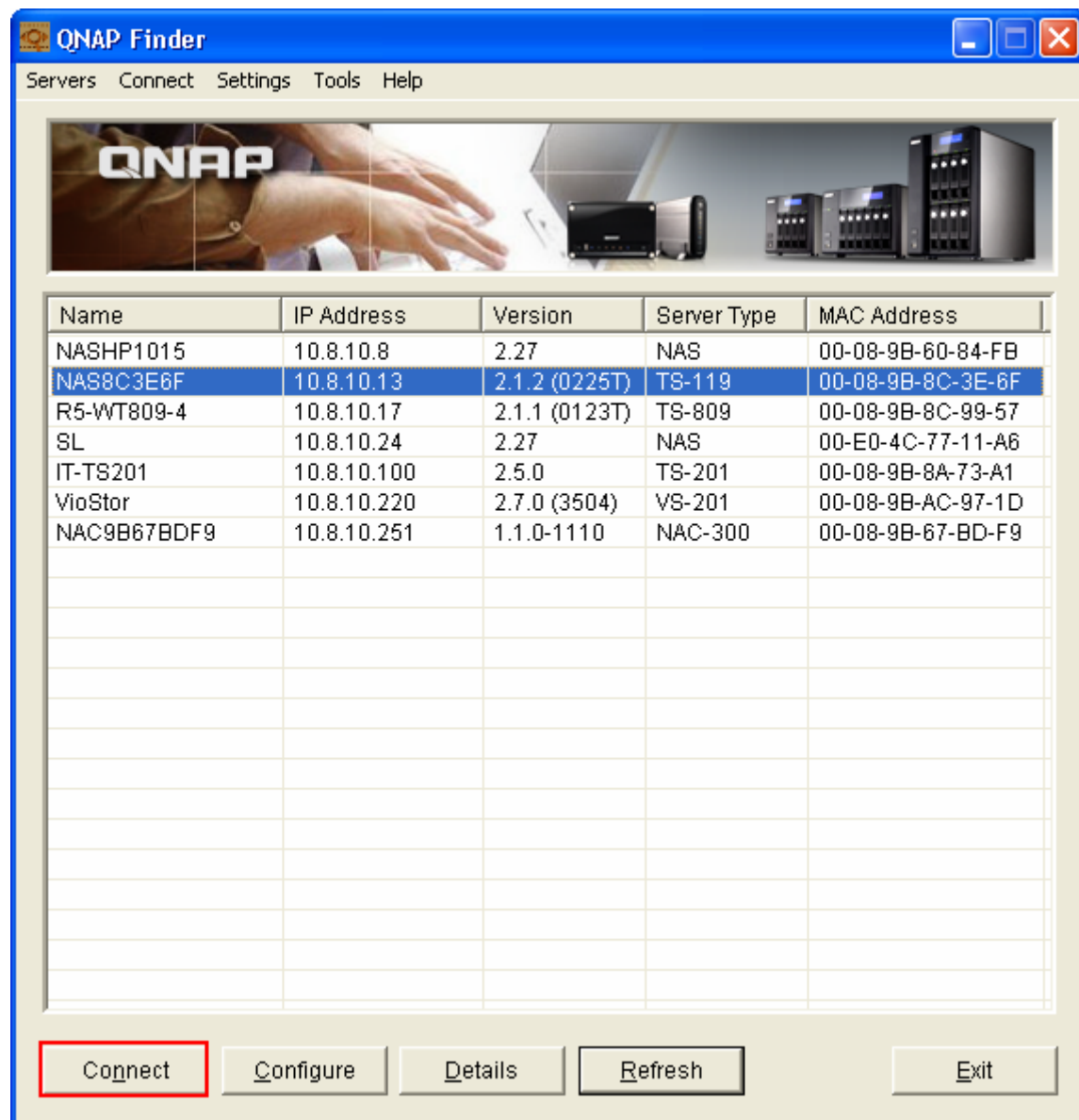
The 'Map Network Drive' dialog box has a blue title bar with a close button. It features a left sidebar with a folder icon and a main area with the following elements:

- Text: "Windows can help you connect to a shared network folder and assign a drive letter to the connection so that you can access the folder using My Computer."
- Text: "Specify the drive letter for the connection and the folder that you want to connect to:"
- Field "Drive:" with a dropdown menu showing "Z:".
- Field "Folder:" with a dropdown menu showing "\\NAS8C3E6F\\Public" and a "Browse..." button.
- Text: "Example: \\server\\share"
- Checkbox "Reconnect at logon" which is checked.
- Text: "Connect using a [different user name.](#)"
- Text: "[Sign up for online storage or connect to a network server.](#)"
- Buttons "< Back", "Finish", and "Cancel" at the bottom.

- d. Upon successful connection, you can start to use the network share as a local drive in Windows Explorer.

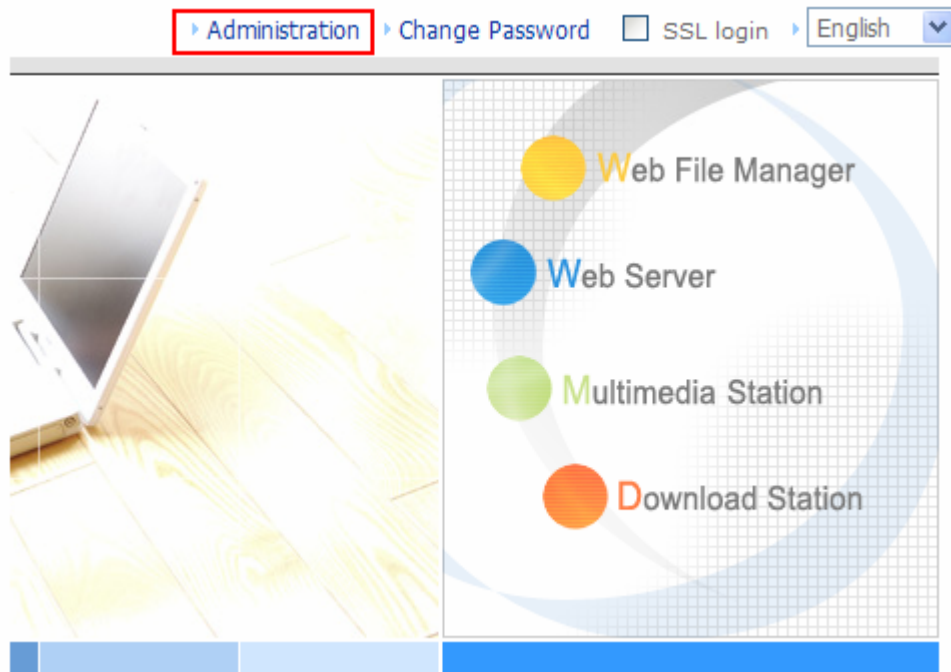


8. The Finder appears when all the configurations are completed. Select a Turbo NAS on the list and click "Connect".



9. When the administration page of the NAS is shown, you can start to use the services. To modify the system settings, click "Administration". Enter the user name and password to login.

Default user name: **admin**  
Password: **admin**

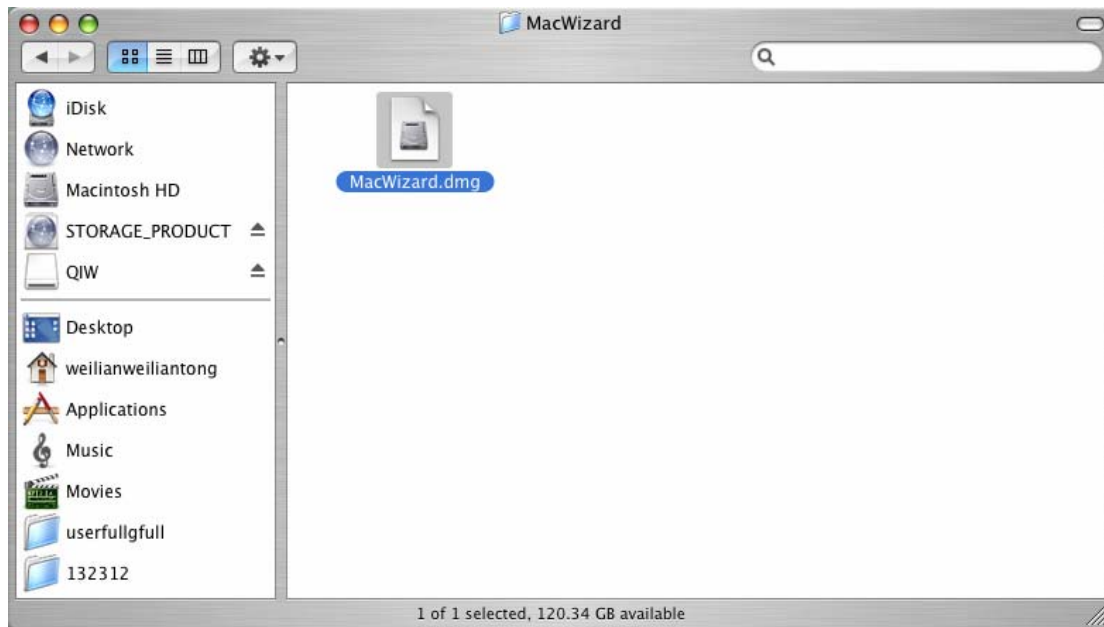


**Note:**

- It is recommended to use Internet Explorer 6.0 or above to access the NAS. If the OS of your PC is Windows® 98, the NAS supports Internet Explorer 6.0 or above only.
- The NAS also supports Mozilla Firefox.

## 2.4.2 Mac Users

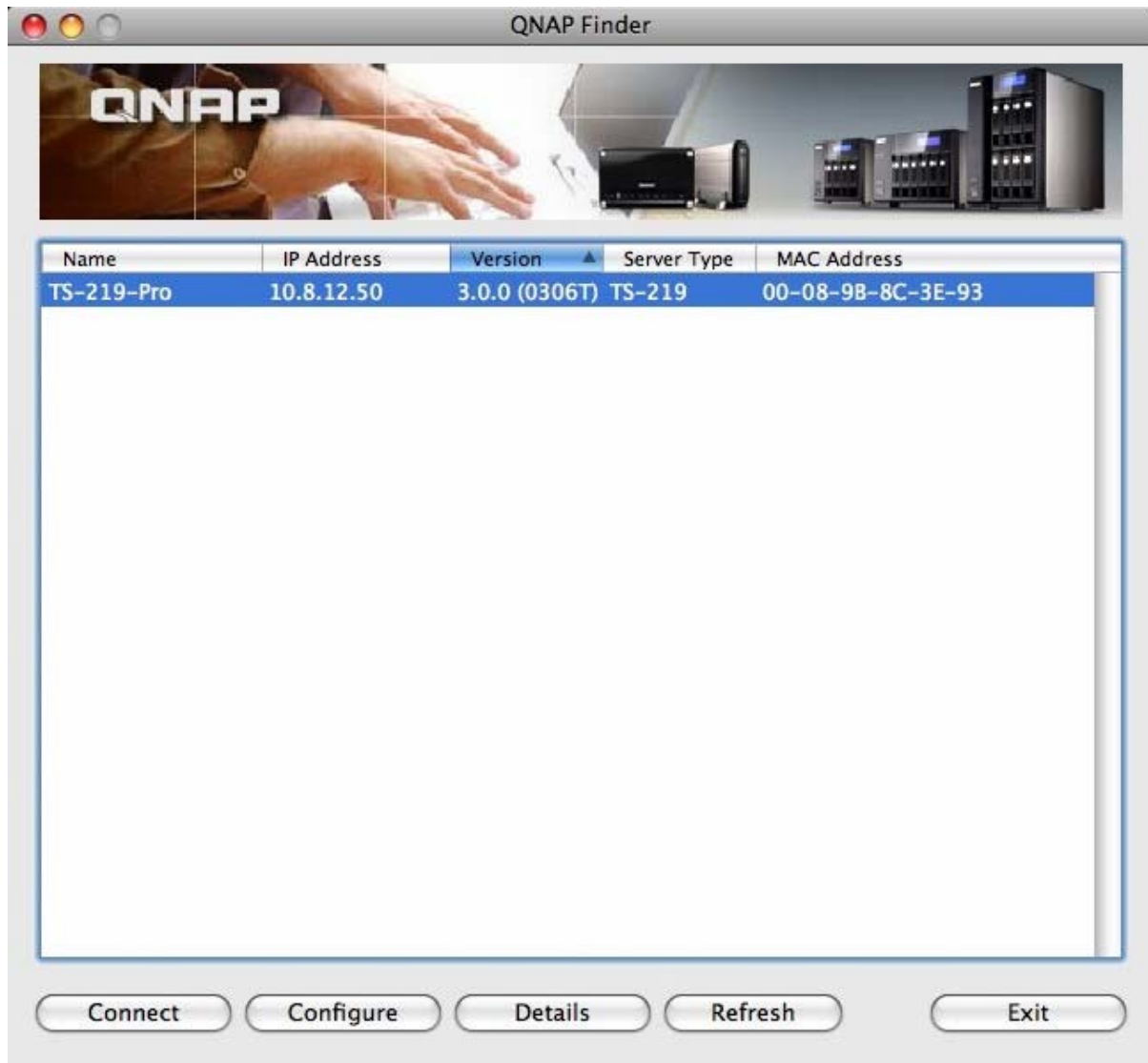
1. Insert the NAS CD-ROM in your Mac and find the directory QFinder4Mac. Then run QFinder4Mac.dmg.



2. Run QFinder.



3. Follow the on-screen instructions to complete the configuration. Please wait patiently when changing the system settings. The NAS will restart after changing the settings.



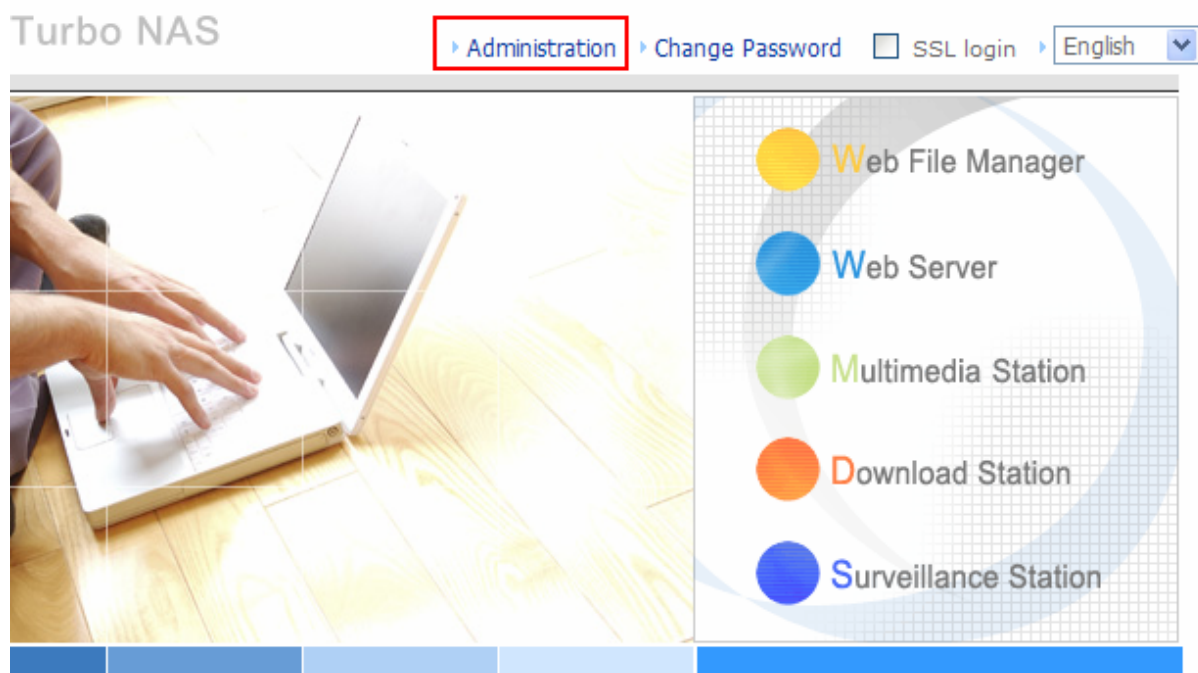
**Note:**

1. Mac Quick Install Wizard does not support mapping network drive.
2. It is recommended to access the NAS by Mozilla Firefox in Mac. Safari does not support Download Station of the NAS.

## 2.5 NAS Quick Configuration (by Web Interface)

Open a web browser and enter the NAS IP. Login the NAS administration page. You can check the NAS IP by the Finder.

Default user name: **admin**  
Password: **admin**

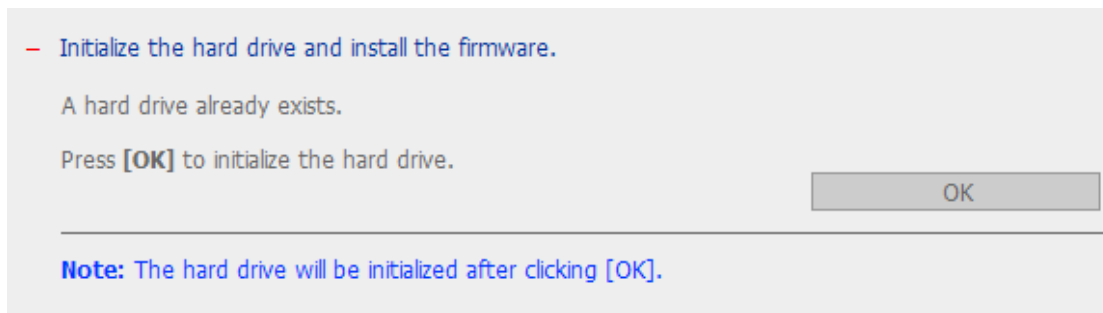


If no hard drive is installed on the NAS, the following page will be shown. Install a hard drive on the NAS.





If a hard drive is detected, click "OK".



— Initialize the hard drive and install the firmware.

A hard drive already exists.

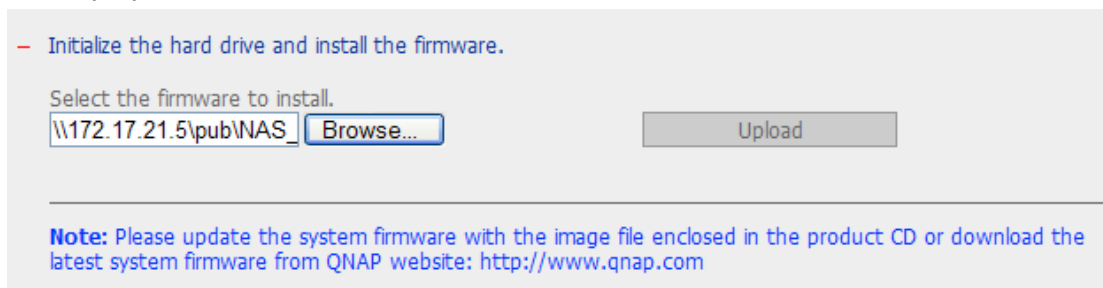
Press **[OK]** to initialize the hard drive.

**OK**

---

**Note:** The hard drive will be initialized after clicking [OK].

Browse and select the correct firmware of the NAS. Click "Upload". You can find the firmware in the enclosed product CD or download the latest firmware from QNAP website [www.qnap.com/](http://www.qnap.com/).



— Initialize the hard drive and install the firmware.

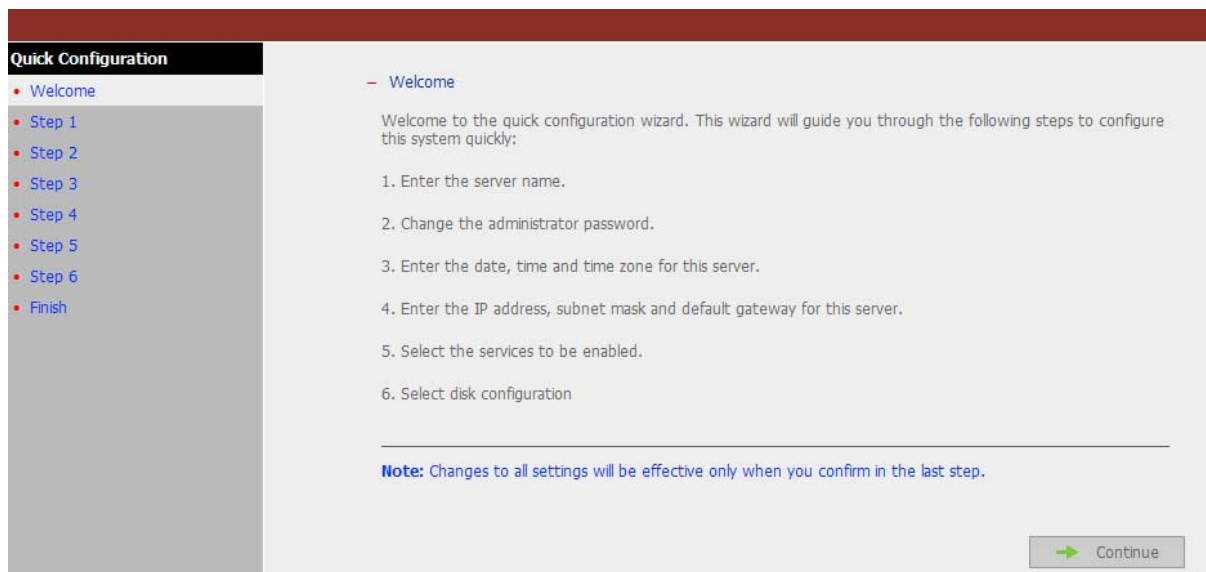
Select the firmware to install.

**Browse...** **Upload**

---

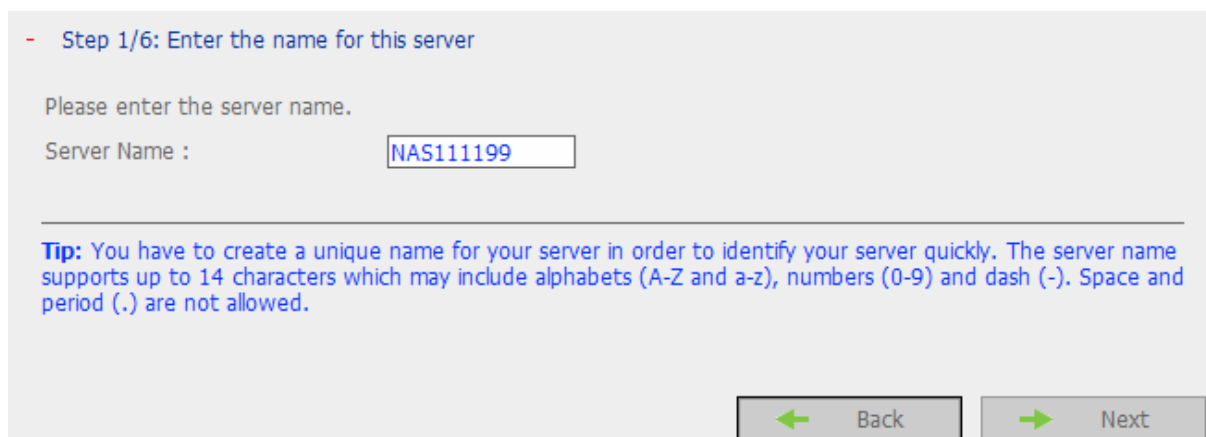
**Note:** Please update the system firmware with the image file enclosed in the product CD or download the latest system firmware from QNAP website: <http://www.qnap.com>

The Quick Configuration page is shown. Click "Continue". Follow the instructions to configure the NAS.



The screenshot shows the 'Quick Configuration' window. On the left is a sidebar with a list of steps: Welcome, Step 1, Step 2, Step 3, Step 4, Step 5, Step 6, and Finish. 'Welcome' is currently selected. The main area displays a 'Welcome' message and a list of six steps to follow: 1. Enter the server name, 2. Change the administrator password, 3. Enter the date, time and time zone for this server, 4. Enter the IP address, subnet mask and default gateway for this server, 5. Select the services to be enabled, and 6. Select disk configuration. A note at the bottom states: 'Note: Changes to all settings will be effective only when you confirm in the last step.' A 'Continue' button with a green arrow is located in the bottom right corner.

Step 1. Enter the server name.



The screenshot shows the 'Step 1/6: Enter the name for this server' screen. It prompts the user to 'Please enter the server name.' and shows a text input field with 'NAS111199' entered. Below the input field is a tip: 'Tip: You have to create a unique name for your server in order to identify your server quickly. The server name supports up to 14 characters which may include alphabets (A-Z and a-z), numbers (0-9) and dash (-). Space and period (.) are not allowed.' At the bottom right, there are two buttons: 'Back' with a left-pointing green arrow and 'Next' with a right-pointing green arrow.

Step 2. Change the administrator password or select to use the original password.

- Step 2/6: Change the administrator password.

Change the administrator password.

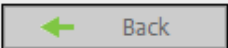
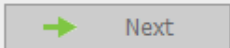
Password :

Verify Password :

☒ Use the original password

---

**Note:** If you select "Use the original password", the administrator password will not be changed.

 Back  Next

Step 3. Enter the date, time and select the time zone for the server.

- Step 3/6: Enter the date, time and time zone for this server.

Time Zone :

Date / Time:  :  :  :

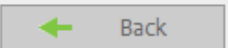
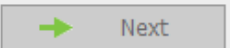
☐ Synchronize with an Internet time server automatically

Server:   (Status: --)

☒ Set the server time the same as your computer time.

---

**Tip:** Enable "Synchronize with an Internet time server automatically", the server time will be synchronized with the NTP server automatically.

 Back  Next

Step 4. Enter the IP address, subnet mask and default gateway for the server.

- Step 4/6: Enter the IP address, subnet mask and default gateway for this server.

☒ Obtain TCP/IP settings automatically via DHCP  
☐ Use the following settings

IP Address:  .  .  .

Subnet Mask:  .  .  .

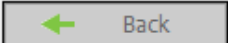
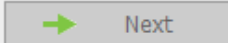
Default Gateway:  .  .  .

Primary DNS Server  .  .  .

Secondary DNS Server  .  .  .

---

**Tip:** If you do not need to specify the gateway IP, enter "0.0.0.0". To use a fixed IP, enter the correct DNS server IP. Otherwise, the NAS may not be able to synchronize the server time with the NTP server or send alert emails.

 Back  Next

**Note:**

1. Please contact your ISP or network administrator for the IP address of primary and secondary DNS servers. When the NAS plays the role as a terminal and needs to perform independent connection, e.g. BT download, you must enter at least one DNS server IP for proper URL connection. Otherwise, the function may not work properly.
2. If you select to obtain IP address via DHCP, there is no need to configure the primary and secondary DNS servers. You can enter "0.0.0.0" in the settings.


Step 5. Select the services to enable on the NAS.


- Step 5/6: Select the services to be enabled.

Network services:	<input checked="" type="checkbox"/> Microsoft Networking	<input type="checkbox"/> Apple Networking	<input type="checkbox"/> Unix/Linux NFS
File services:	<input checked="" type="checkbox"/> Web File Manager	<input checked="" type="checkbox"/> FTP Service	<input type="checkbox"/> Download Station
Multimedia services:	<input type="checkbox"/> Multimedia Station	<input type="checkbox"/> UPnP multimedia server	<input type="checkbox"/> iTunes service
Web server services:	<input type="checkbox"/> Web Server	<input type="checkbox"/> MySQL server	

---

**Tip:** You can select the network services to be enabled after the system is ready. To configure the detailed settings of the services, please go to the corresponding administration pages after finishing the quick configuration.

 Back

 Next

Step 6. Initialize disk volume in the NAS for the first time configuration.

- Step 6/6: Select the disk configuration

**Note:** The hard drive(s) has (have) been initialized. Select "Do not set disk configuration" or the drive data will be cleared.

Please select the disk configuration for the initialization.

Disk configuration:  Total available storage capacity: 73.03 GB


You may select to use the hard drives as single disk volumes. However, when a drive failure occurs, all data will be lost.


The hard drive(s) detected by NAS:

Disk	Model	Capacity
Drive 1	Seagate ST380013AS 3.18	74.53 GB

---

**Tip:** All settings will be effective after confirming the changes in the last step.

 Back

 Next

The basic system settings are shown. Click "Start Installation" to begin system installation.

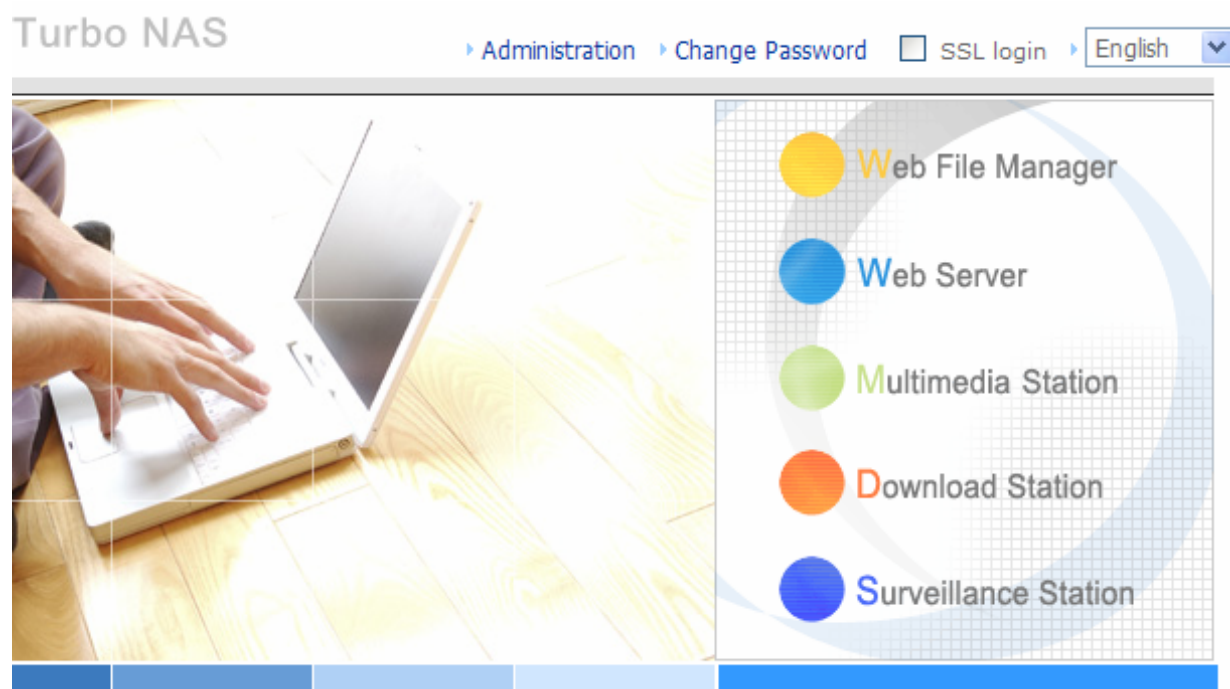
— Finish

The changes you have made to the server are as below. Click "Start installation" to begin the quick configuration; or click "Back" to return to the previous steps to modify the settings.

Server Name :	NAS8C3E6F	
Password:	The password is unchanged.	
Time Zone :	(GMT) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London	
Time Setting:	2009/2/17 19:41:51	
Network :	Obtain TCP/IP settings automatically via DHCP	
Primary DNS Server	0.0.0.0	
Secondary DNS Server	0.0.0.0	
Network services:	Microsoft Networking, Web File Manager, FTP Service, Download Station, Multimedia Station, UPnP multimedia server	
Disk configuration:	Do not set disk configuration	
Drive 1:	Seagate ST380013AS 3.18	74.53 GB

[← Back](#) [Start installation](#)

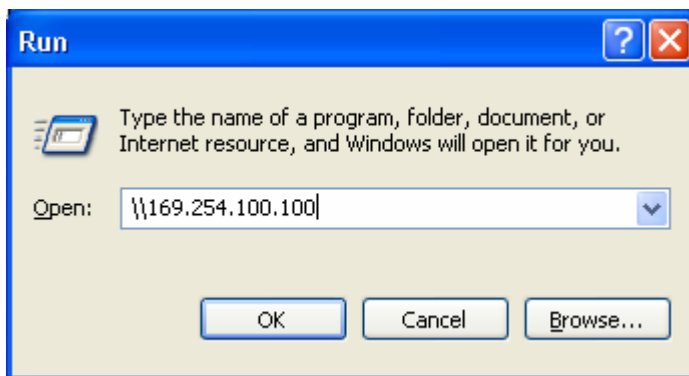
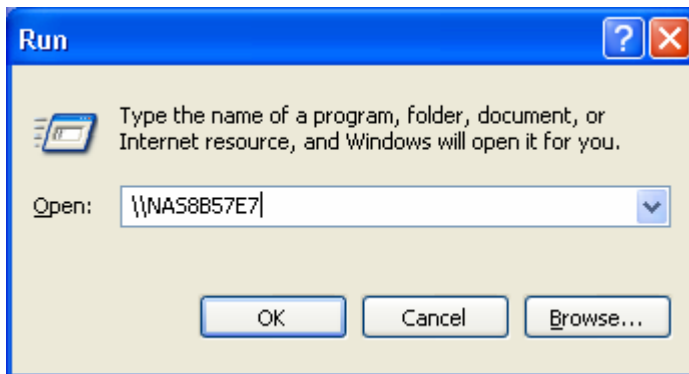
The NAS restarts after the quick configuration. When the login page is shown, you can start to use the services of the NAS.



## Chapter 3 Use the Powerful Services of NAS

### **A. Use network share-Public folder**

1. You can access the public folder of the NAS by the following means:
  - a. Open My Network Places and find the workgroup of the NAS. If you cannot find the server, browse the whole network to search for the NAS. Double click the name of the NAS for connection.
  - b. Use Run function in Windows. Enter **\\[NAS name]** or **\\[NAS IP]** to access share folder on the NAS.



- c. Windows® users can use Finder to find the NAS. When the administration page is shown, click "Web File Manager". Enter the user name and password, and then start to manage the NAS.
2. You can upload files to the network shares.

## **B. Manage the NAS**

### ■ **Manage the NAS using web browser by Windows® or Mac**

1. You can access the NAS web administration page by the following methods:
  - a. Use Finder to find the NAS.
  - b. Open a web browser and enter **http://[NAS IP]:8080\***

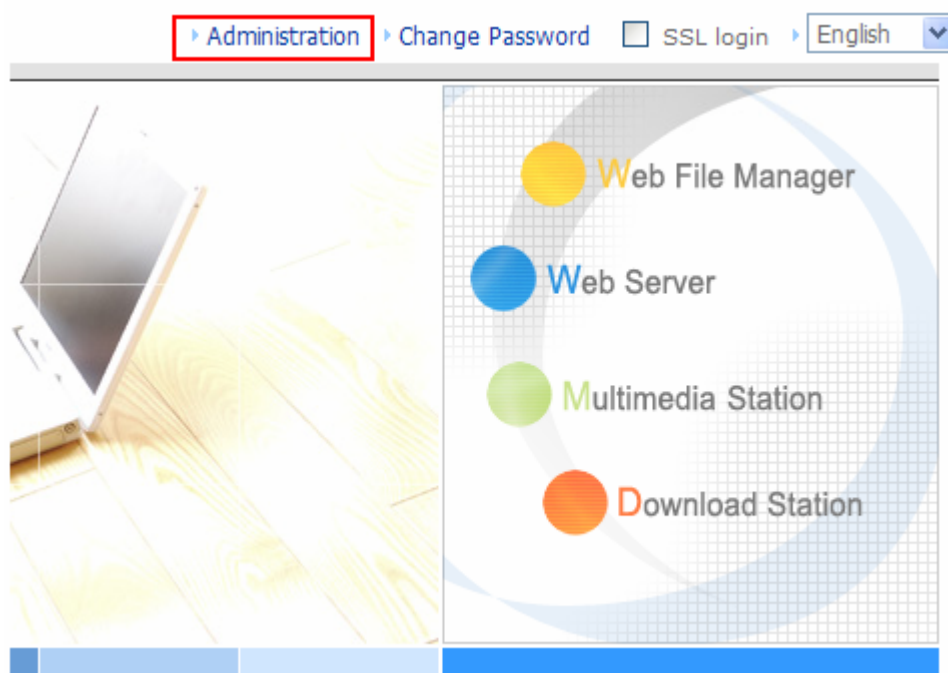
#### **Note:**

- It is recommended to use Microsoft® Internet Explorer 6.0 or above to access the NAS. If you are using Windows® 98, please access the NAS by Internet Explorer 6.0 only.
- Please use Mozilla Firefox to access the NAS from Mac.

\* If you are using DHCP: (a) connect the PC to the NAS directly, please use the default IP address 169.254.100.100:8080 of the NAS; (b) connect the NAS by network, please run the Finder to view the IP address of the NAS.

2. When the administration page of the NAS is shown, you can start to use the services. To modify system settings, click "Administration". Enter the user name and password to login.

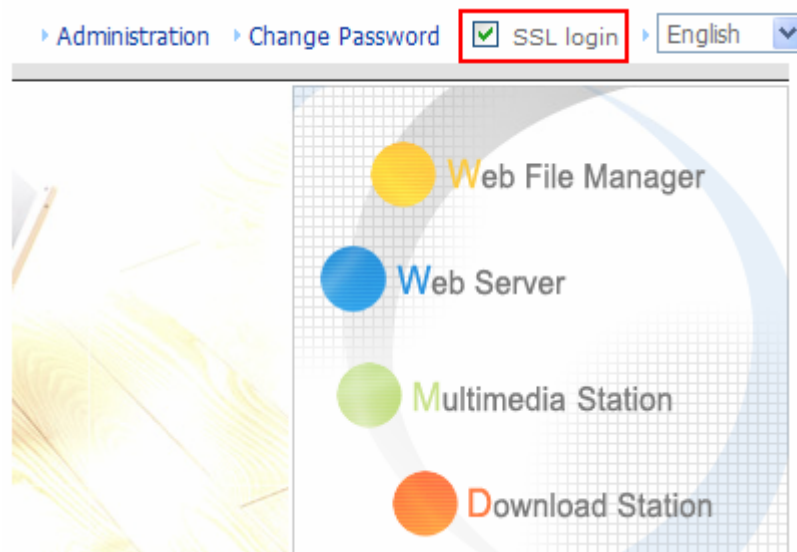
Default user name: admin  
Password: admin





3. The NAS supports SSL secure login which enables you to configure and manage the server by encrypted transfer. To use this function, check the box "SSL login" on the administration page and login the server.

**Note:** If your NAS is placed behind an NAT gateway and you want to access the NAS by secure login from the Internet, you must open the port 443 on your NAT and forward this port to LAN IP of the NAS.



## **C. Use the NAS Services**

### **■ Multimedia Station**

The NAS provides a web-based interface for you to manage and share personal albums and multimedia files. It also supports music sharing by iTunes Server, and UPnP and DLNA media playing on the local network. Please refer to Chapter 5.

### **■ Download Station**

The NAS supports PC-less BT, HTTP, and FTP download. You can add the download tasks to the NAS and let the server finish the download independently. Please refer to Chapter 6.

### **■ Mirror Station**

The NAS supports unique Q-RAID 1 technology for real-time data backup to an external USB or eSATA disk. Please refer to Chapters 3.4.

### **■ Disaster Recovery**

The NAS supports remote share folder backup over the network. In case of data damage in your PC, you can restore the backup data. Please refer to Chapter 3.7.10.

### **■ Web Server**

The NAS enables you to create your own website easily. It also supports Joomla!, PHP and MySQL/SQLite to establish interactive websites. Please refer to Chapter 7.

### **■ Printer Server**

The NAS supports network printer sharing function by direct USB connection. Please refer to Chapter 3.4.4.

### **■ FTP Server**

You can set up your own FTP server with the NAS without any professional assistance. Please refer to Chapter 8.

### ■ **Backup Server**

NetBak Replicator is the powerful software designed for Windows® users to back up the data from the PC to the NAS. Block level remote replication is supported to provide the most reliable, instant, and secure data backup mechanism. Please refer to Chapter 10.

### ■ **File Server**



The NAS can be configured as a file server for data sharing among the users and user groups using Windows, Mac or Linux/ UNIX OS over the network. Please refer to Chapter 3.6 and Chapter 9.

### ■ **Surveillance Station**

The Surveillance Station enables you to view and record live video from your network cameras. Please refer to Chapter 3.3.13.

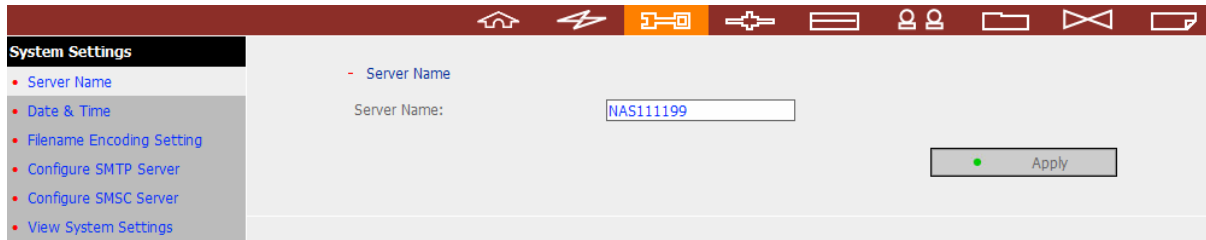
## 3.1 Server Administration

There are 8 main sections in server administration:

	<b>Quick Configuration</b> Quick step-by-step server setup		<b>User Management</b> Users · User Groups · Quota
	<b>System Settings</b> Server Name · Date & Time · Filename Encoding Setting · Configure SMTP Server · Configure SMMC Server · View System Settings		<b>Network Share Management</b> Network Share Management · NFS Access Control · Network Share Status
	<b>Network Settings</b> TCP/IP Configuration · Microsoft Networking · Apple Networking · NFS Service · Web File Manager · FTP Service · Multimedia Station · iTunes Service · Download Station · Web Server · DDNS Service · MySQL Server · Surveillance Station · System Port Management · View Network Settings		<b>System Tools</b> Alert Notification · Auto Power on/off Management · Hardware Settings · UPS · Hard Disk SMART · System Update · USB one touch copy backup · Change Logo · Back up to an external storage device · Remote Replication · Backup/ Restore/ Reset Settings · IP Filter · Network Recycle Bin · Remote Login · QPKG · Import SSL Secure Certificate
	<b>Device Configuration</b> SATA Disk · Disk Volume Encryption Management · iSCSI Target · External Storage Device · USB Printer		<b>System Logs</b> Event Logs · System Connection Logs · On-line Users · System Information · Syslog Settings

## 3.2 System Settings

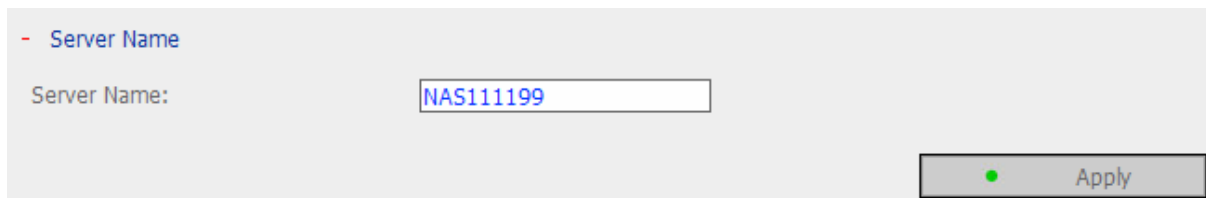
You can configure the basic system settings, e.g. server name, date and time, file name encoding.



The screenshot shows a web-based configuration interface. At the top is a dark red navigation bar with several icons. Below it is a sidebar with a black header 'System Settings' and a list of menu items: 'Server Name', 'Date & Time', 'Filename Encoding Setting', 'Configure SMTP Server', 'Configure SMSC Server', and 'View System Settings'. The 'Server Name' item is selected. The main content area has a light gray background and contains a section titled '- Server Name'. Below this title is a label 'Server Name:' followed by a text input field containing the value 'NAS111199'. To the right of the input field is a button with a green dot icon and the text 'Apply'.

### 3.2.1 Server Name

Enter the name of the NAS. The server name can be 14 characters long at maximum, which supports alphabets, numbers, and hyphen (-). The server does not accept names with space, period (.), or names in pure number.



This is a close-up view of the configuration field for the server name. It shows the label '- Server Name' in blue text. Below it is the label 'Server Name:' followed by a text input field containing the value 'NAS111199'. To the right of the input field is a button with a green dot icon and the text 'Apply'.

### 3.2.2 Date & Time

Set the date, time, and time zone according to your location. If the settings are incorrect, the following problems may occur:

- When using a web browser to access the server or save a file, the display time of the action will be incorrect.
- The time of event log displayed will be inconsistent with the actual time when an action occurs.

- Adjust the date, time and time zone of this server

Time Zone: (GMT+08:00) Taipei ▼

Date / Time: 2009/2/6 ▼ 19 ▼ : 56 ▼ : 35 ▼

☐ Synchronize with an Internet time server automatically

Server: pool.ntp.org Update now (Status: --)

Time Interval: 1 day(s) ▼

☐ Set the server time the same as your computer time.

Apply

#### ✓ Synchronize with an Internet time server automatically

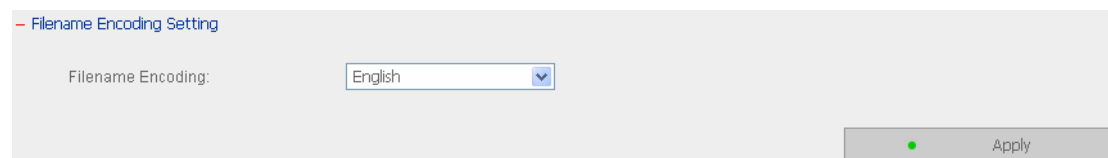
You can enable this option to update the date and time of the system automatically with specified NTP (Network Time Protocol) server. Enter the IP address or domain name of the NTP server, e.g. time.nist.gov, time.windows.com. Then enter the time interval for adjusting the time.

**Note:** The first time you enable NTP server, it may take several minutes for time synchronization before the time is correctly adjusted.

### 3.2.3 Filename Encoding Setting

Select the language the NAS uses to display files and directories.

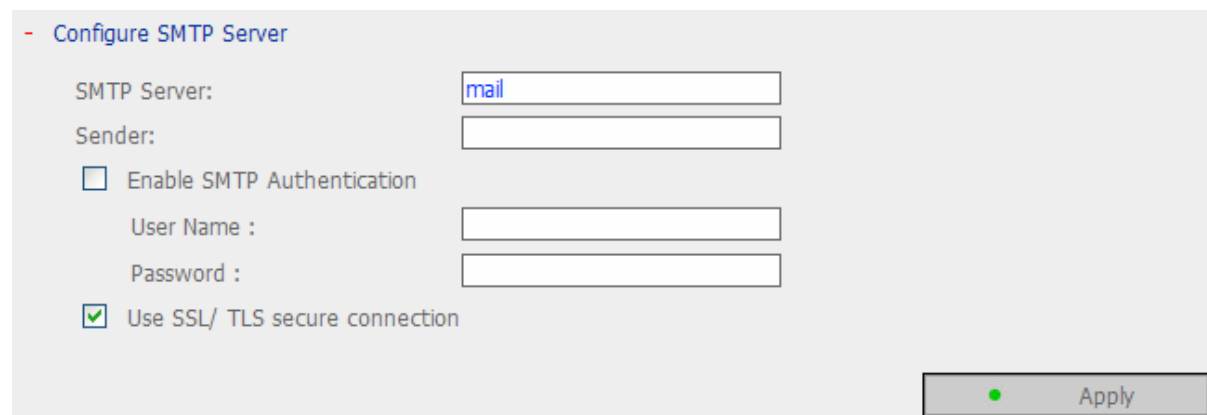
**Note:** All files and directories on the NAS will be created using Unicode encoding. If your FTP clients or the OS of your PC does not support Unicode, e.g. Windows® 95/98/ME, select the language the same as your OS here in order to view the files and directories on the server properly.



The screenshot shows a web interface titled "Filename Encoding Setting". It contains a label "Filename Encoding:" followed by a dropdown menu currently set to "English". At the bottom right, there is a green status indicator and an "Apply" button.

### 3.2.4 Configure SMTP Server

Configure the SMTP server for outgoing mails of this server. If your mail server requires SMTP authentication, please enter the user name and password for the mail server.



The screenshot shows a web interface titled "Configure SMTP Server". It includes the following fields and options:

- SMTP Server:
- Sender:
- ☐ Enable SMTP Authentication
  - User Name :
  - Password :
- ☒ Use SSL/ TLS secure connection

At the bottom right, there is a green status indicator and an "Apply" button.

### 3.2.5 Configure SMSC Server

You can configure the SMS server settings to send SMS messages from the NAS. The default SMS service provider is Clickatell. You may also add your own SMS service provider by selecting "Add SMS Provider" on the drop down menu.

When you select "Add SMS service provider", you need to enter the name of the SMS provider and the URL template text.

**Note:** You will not be able to receive the SMS properly if the URL template text entered does not follow your SMS service provider's standard.

- SMSC Settings

You can configure the SMSC settings to send instant system alerts via the SMS service provided by the SMS provider.

SMS Service Provider

Clickatell

Clickatell

Add SMS service provider

<http://www.clickatell.com>

☐ Enable SSL Connection

SSL Port:

443

SMS Server Login Name

SMS Server Login Password

SMS Server API\_ID

●

Apply



### 3.2.6 View System Settings

You can view all current system settings, e.g. server name, on this page.

[- View System Settings](#)

<b>Server Name</b>	
Server Name	NAS111199
<b>Date &amp; Time</b>	
Date	February 10, 2009
Time	6:44:32 PM
Time Zone	(GMT) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London
<b>Filename Encoding</b>	
Code Page	English (437)
<b>System Information</b>	
Version	2.1.1 Build 0210T

 OK

## 3.3 Network Settings

You can configure network settings in this section and enable several powerful applications of the NAS, e.g. Multimedia Station, Download Station, and Web Server.

### 3.3.1 TCP/ IP Configuration

You can select one of the following two methods to configure the TCP/IP settings of the NAS.

The screenshot displays the 'Network Settings' interface. On the left is a sidebar with a list of services: TCP/IP Configuration (selected), Microsoft Networking, Apple Networking, NFS Service, Web File Manager, FTP Service, Multimedia Station, iTunes Service, Download Station, Web Server, DDNS Service, MySQL Server, Surveillance Station, System Port Management, and View Network Settings. The main area is titled 'TCP/IP Configuration'. It features a 'Network transfer rate' dropdown set to 'Auto-negotiation'. Two radio buttons are present: 'Obtain IP address settings automatically via DHCP' (selected) and 'Use static IP address'. Under the static IP option, there are input fields for 'Fixed IP Address' (169.254.100.100), 'Subnet Mask' (255.255.0.0), and 'Default Gateway' (169.254.100.100). There are also fields for 'Primary DNS Server' and 'Secondary DNS Server', both set to 0.0.0.0. A checkbox for 'Enable DHCP Server' is unchecked. Below this, there are fields for 'Start IP Address' (169.254.1.100), 'End IP Address' (169.254.1.200), and 'Lease Time' (1 Day(s), 0 Hour(s)). A section for 'Current connection status' shows 'Connection speed: 100 Mbps, MTU: 1500 Bytes'. A 'Jumbo Frame Setting (MTU)' section contains explanatory text and a dropdown menu set to 'Disable Jumbo Frame, MTU value is 1500 bytes'. An 'Apply' button is at the bottom right.

- **Obtain IP address settings automatically via DHCP**

If your network supports DHCP, the NAS will use DHCP protocol to retrieve the IP address and related information automatically.

- **Use static IP address**

To use fixed IP address for network connection, enter fixed IP address, subnet mask and default gateway.

**Primary DNS Server:** Enter the IP address of primary DNS server that provides DNS service for the NAS in external network.

**Secondary DNS Server:** Enter the IP address of secondary DNS server that provides DNS service for the NAS in external network.

**Note:**

1. Please contact your ISP or network administrator for the IP address of primary and secondary DNS servers. When the NAS plays the role as a terminal and needs to perform independent connection, e.g. BT download, you must enter at least one DNS server IP for proper URL connection. Otherwise, the function may not work properly.
2. If you select to obtain IP address via DHCP, there is no need to configure the primary and secondary DNS servers. You can enter "0.0.0.0" in the settings.

**Enable DHCP Server**

If no DHCP is available in the LAN where the NAS locates, you can enable this function to enable the NAS as a DHCP server and allocate dynamic IP address to DHCP clients in LAN.

You can set the range of IP addresses allocated by DHCP server and the lease time. Lease time refers to time that IP address is leased to the clients by DHCP server. When the time expires, the client has to acquire an IP address again.

For example, to establish a DLNA network, and share the multimedia files on the NAS to DLNA DMP via UPnP while there is no NAT gateway that supports DHCP server, you can enable DHCP server of the NAS. The NAS will allocate dynamic IP address to DMP or other clients automatically and set up a local network.

**Note:** If there is an existing DHCP server in your LAN, do not enable this function. Otherwise, there will be IP address allocation and network access errors.

## Jumbo Frame Settings (MTU)

"Jumbo Frames" refer to Ethernet frames that are larger than 1500 bytes. It is designed to enhance Ethernet networking throughput and reduce the CPU utilization of large file transfers by enabling more efficient larger payloads per packet.

Maximum Transmission Unit (MTU) refers to the size (in bytes) of the largest packet that a given layer of a communications protocol can transmit.

The NAS uses standard Ethernet frames: **1500 bytes** by default. If your network appliances support Jumbo Frame setting, select the appropriate MTU value for your network environment. The NAS supports 4074, 7418, and 9000 bytes for MTU.

**Note:** Jumbo Frame setting is valid in Gigabit network environment only. Besides, all network appliances connected must enable Jumbo Frame and use the same MTU value.

### 3.3.2 Microsoft Networking

- Microsoft Networking

☒ Enable file service for Microsoft networking

☒ Standalone Server

☐ AD Domain Member

Server Description: NAS Server

Workgroup: NAS

AD Server Name:

Domain Name:

Domain Username:

Password:

☐ Enable WINS server

☐ Use the specified WINS server

WINS server IP address: . . .

☐ Domain Master

Apply

**Enable file service for Microsoft networking:** If you are using Microsoft® Windows®, enable this service to access the files on network share folders. Assign a workgroup name.

✓ **Standalone Server**

Use local users for user authentication.

✓ **AD Domain Member**

The NAS supports Windows 2003 AD (Active Directory) to provide quick and direct import of user accounts to the existing AD server available in your network. This function helps you to save time and effort on creating user accounts and passwords and lowers IT maintenance cost by automatic configuration procedure.

➤ **Server Description**

Describe the NAS for users to identify the server. To use the NAS on the

Microsoft Windows OS, you must enable Microsoft Network Services.

➤ **Workgroup**

Specify the workgroup the NAS belongs to. The workgroup is a computer group unit in Microsoft Windows network for network sharing.

➤ **AD Server Name**

Enter the name of the AD server when AD domain is selected for authentication.

➤ **Domain Name**

The name of Microsoft domain. When you select AD domain, you must enter the domain name, the login user name, and the password.

Please refer to Chapter 11 for the information of AD authentication.

✓ **WINS server**

If the local network has a WINS server installed, specify the IP address. The NAS will automatically register its name and IP address with WINS service. If you have a WINS server in your network and want to use this server, enter the WINS server IP.

✓ **Domain Master**

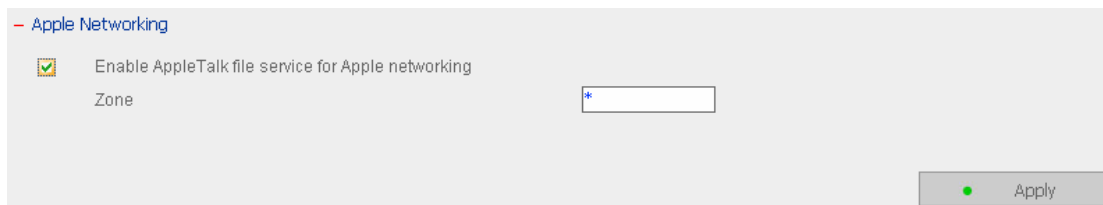
There is a unique Domain Master Browser for collecting and recording resources and services available for each PC in the network or workgroup of Windows.

When you find the waiting time for accessing Network Neighborhood too long, it may be caused by failure of an existing master browser, or there is no master browser in the network. If there is no master browser in your network, you can check the box Domain Master in this section to configure the NAS as the master browser to enhance the speed of accessing information on Network Neighborhood.

### 3.3.3 Apple Network

To access the NAS from Mac, enable AppleTalk network support.

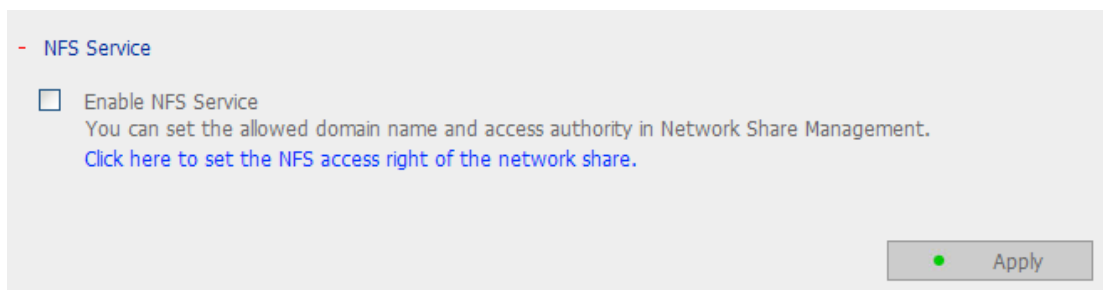
If your AppleTalk network uses extended networks, and is assigned with multiple zones, assign a zone name to the NAS. If you do not want to assign a network zone, enter an asterisk (\*) to use the default setting. **This setting is disabled by default.**



The screenshot shows the 'Apple Networking' settings panel. It features a checked checkbox for 'Enable AppleTalk file service for Apple networking'. Below this, there is a 'Zone' label and a text input field containing an asterisk (\*). An 'Apply' button with a green status indicator is located at the bottom right.

### 3.3.4 NFS Service

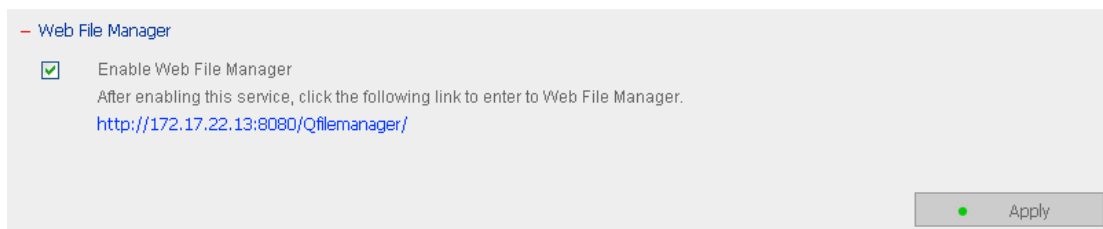
To access the NAS from Linux, enable NFS service. For the information of connecting to the NAS via NFS on Linux, please refer to Chapter 12.



The screenshot shows the 'NFS Service' settings panel. It features an unchecked checkbox for 'Enable NFS Service'. Below this, there is explanatory text: 'You can set the allowed domain name and access authority in Network Share Management. Click here to set the NFS access right of the network share.' An 'Apply' button with a green status indicator is located at the bottom right.

### 3.3.5 Web File Manager

To access the NAS via the web browser, enable Web File Manager. If the NAS is connected to the Internet and uses a valid IP address, you can access files on the server by web browser from anywhere. For more information, please refer to Chapter 9. The NAS supports SSL secure login. You can select SSL login on the NAS administration page and login Web File Manager via https; or enter https://NAS IP:443/Qfilemanager/ in the browser.





### 3.3.6 FTP Service

When you enable FTP service, you can define the port number for the service and maximum number of users connected to the FTP at the same time.

FTP Service

☒ Enable FTP Service

Protocol type:

☒ FTP (standard)☐ FTP with SSL/TLS (Explicit)

Port Number

21

Unicode Support

☐ Yes ☒ No

Enable Anonymous

☐ Yes ☒ No

Passive FTP Port Range

☒ Use the default port range (55536 - 56559)☐ Define port range: 55536 - 56559

☐ Respond with external IP address for passive FTP connection request

External IP address: (Detect the IP address automatically if this blank is left empty)

Maximum number of all FTP connections:

30

Maximum number of connections for a single account

10

☐ Enable FTP transfer limitation(0 means unlimited)

Single connection: Maximum download rate (KB/s): 0 KB/s, Maximum upload rate (KB/s): 0 KB/s

Note: If your FTP client does not support Unicode, please select "No" for Unicode Support and select a supported filename encoding from [Filename Encoding Setting] under [System Settings] so that the folders and files on FTP can be properly shown.

Apply

✓ **Select Protocol Type**

Select to use standard FTP connection or SSL/TLS encrypted FTP. Select the corresponding protocol type in your client FTP software to ensure successful connection.

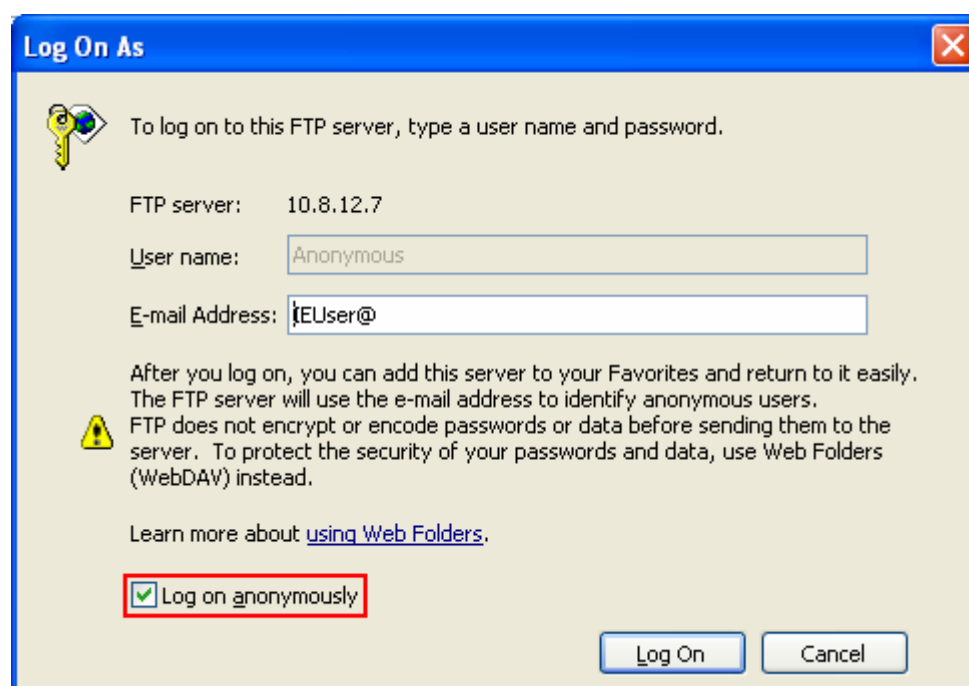
✓ **Unicode Support**

Select to enable or disable Unicode Support. The default setting is No. Since most

FTP clients do not support Unicode currently, it is recommended that you disable Unicode support here and select the language the same as your OS in "System Settings—Encoding Setting" page so that the folders and files on FTP can be properly shown (please refer to Chapter 3.2.3). If your FTP client supports Unicode, make sure you have enabled Unicode support for both your client and the NAS.

✓ **Anonymous Login**

You can enable anonymous login to allow users to access the FTP server of the NAS anonymously. The users can access the folders and files which are opened for public access. If this option is disabled, the users must enter an authorized user name and password to access the server.



✓ **Passive FTP Port Range**

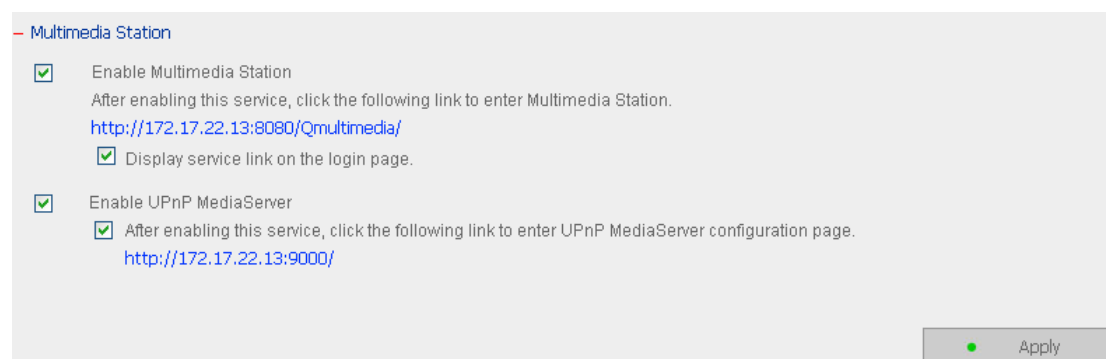
You can use the default port range (55536-56559) or define a port range larger than 1023. When using this function, make sure you have opened the configured port range on your router or firewall.

✓ **FTP Transfer Limitation**

You can configure the maximum number of all FTP connections, maximum connections of a single account and the maximum upload and download rates of a single connection.

### 3.3.7 Multimedia Station

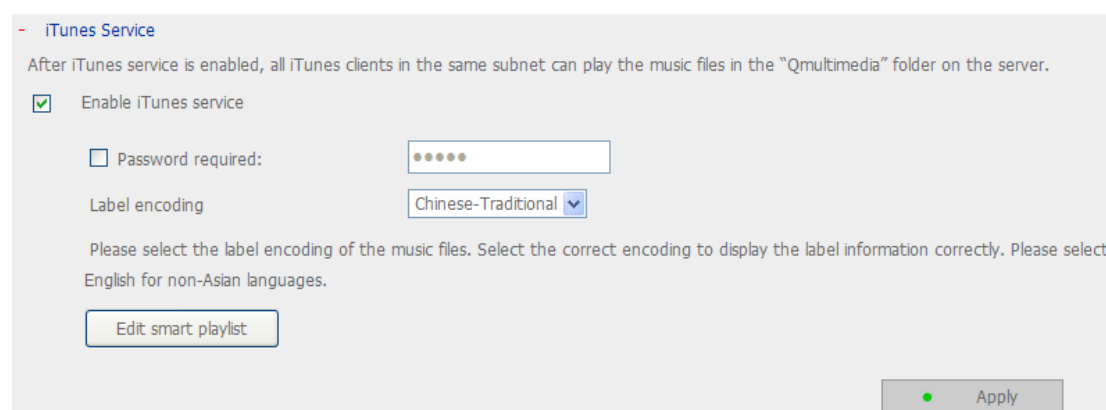
To share multimedia files like photos, music or video files on the network, enable the Multimedia Station. For further information of Multimedia Station, iTunes service and UPnP Media Server, please refer to Chapter 5.



The screenshot shows the 'Multimedia Station' configuration page. It has a title bar with a minus sign and the text 'Multimedia Station'. Below the title bar, there are two main sections. The first section is 'Enable Multimedia Station', which has a checked checkbox. Below it, there is a text instruction: 'After enabling this service, click the following link to enter Multimedia Station.' followed by a blue hyperlink: <http://172.17.22.13:8080/Qmultimedia/>. Below this is another checked checkbox with the text 'Display service link on the login page.' The second section is 'Enable UPnP MediaServer', which also has a checked checkbox. Below it, there is a text instruction: 'After enabling this service, click the following link to enter UPnP MediaServer configuration page.' followed by a blue hyperlink: <http://172.17.22.13:9000/>. At the bottom right of the page, there is a green status indicator (a dot) and an 'Apply' button.

### 3.3.8 iTunes Service

By enabling the iTunes service, the NAS shares the mp3 files in the Qmultimedia folder to all the iTunes clients available on the same subnet. The clients can automatically detect, browse, and play the music files on the NAS. For further details, please refer to Chapter 5.2.



The screenshot shows the 'iTunes Service' configuration page. It has a title bar with a minus sign and the text 'iTunes Service'. Below the title bar, there is a text instruction: 'After iTunes service is enabled, all iTunes clients in the same subnet can play the music files in the "Qmultimedia" folder on the server.' Below this, there is a checked checkbox with the text 'Enable iTunes service'. Below the checkbox, there is a 'Password required:' label with an unchecked checkbox and a password input field with five dots. Below the password field, there is a 'Label encoding' label with a dropdown menu showing 'Chinese-Traditional'. Below the dropdown, there is a text instruction: 'Please select the label encoding of the music files. Select the correct encoding to display the label information correctly. Please select English for non-Asian languages.' Below this, there is a button labeled 'Edit smart playlist'. At the bottom right of the page, there is a green status indicator (a dot) and an 'Apply' button.

### 3.3.9 Download Station

The NAS supports PC-less BT, HTTP, and FTP download. To use download function of the NAS, enable the Download Station. For further information, please refer to Chapter 6.

Download Station

☒

Enable Download Station

After enabling this service, click the following link to enter to Download Station.

<http://172.17.22.13:8080/Qdownload/>

☒

Display service link on the login page.

Apply



**Warning:** Please be warned against illegal downloading of copyrighted materials. The Download Station functionality is provided for downloading authorized files only. Downloading or distribution of unauthorized materials may result in severe civil and criminal penalty. Users are subject to the restrictions of the copyright laws and should accept all the consequences.

### 3.3.10 Web Server

You can publish your own server by enabling the Web Server of the NAS. Enter the port number of the service, the default number is 80. For further information, please refer to Chapter 7.

- Web Server

After enabling this function, you can upload the webpage files to Qweb network share to publish your website.

☒ Enable Web Server [View version](#)

Port Number

After enabling this service, click the following link to enter to Web Server.

<http://172.17.21.125:80/>

The built-in web page applications of the system are as below (make sure you have enabled MySQL server and Web server)

- Click the link on the right to enter Joomla content management system

<http://172.17.21.125:80/Joomla/>

register\_globals ☐ On ☒ Off

Apply

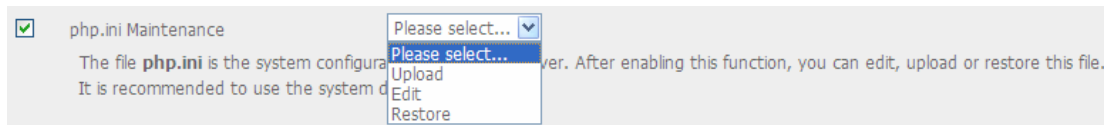
☐ php.ini Maintenance

The file **php.ini** is the system configuration file of Web Server. After enabling this function, you can edit, upload or restore this file. It is recommended to use the system default setting.

#### Configure register\_globals

Select to enable or disable register\_globals. The setting is disabled by default. When the web program asks to enable php register\_globals, enable this option. However, for system security concerns, it is recommended to disable this option.

## php.ini Maintenance



☒ php.ini Maintenance

The file **php.ini** is the system configuration file. After enabling this function, you can edit, upload or restore this file.

It is recommended to use the system default file.

Please select...  
Please select...  
Upload  
Edit  
Restore

Check the box "php.ini Maintenance" to select to upload, edit or restore php.ini.

Edit: Edit the current php.ini file.

Upload: Upload a new php.ini file to replace the current file.

Restore: Restore the php.ini file to system default.

**Note:** To use PHP mail() function, you can go to "System Settings>Configure SMTP Server" to configure the SMTP server settings.

### 3.3.11 DDNS Service

— DDNS Service

After enabling DDNS Service, you can connect to this server by domain name.

☒ Enable Dynamic DNS Service

Select DDNS server: www.dyndns.com ▼

Enter the account information you registered with the DDNS provider:

User Name:

Password:

Host Name:

☐ Check the external IP address automatically 5 minutes ▼

( External IP : 219.85.63.13 )

Note: When the external IP is changed, the system updates the information with the DDNS provider.

● Apply

To set up a server on the Internet and enable users to access it easily, a fixed and easy-to-remember host name is often required. However, if ISP provides only dynamic IP address, the IP address of the server will change from time to time and is difficult to recall. You can enable DDNS service to solve the problem.

After enabling DDNS service of the NAS, whenever the NAS restarts or the IP address is changed, the NAS will notify the DDNS provider immediately to record the new IP address. When the user tries to connect the NAS via the host name, DDNS will transfer the recorded IP address to the user.

#### Enable and configure DDNS of the NAS:

Before using the DDNS service, please register a host name from the DDNS provider\*. The NAS supports the DDNS providers: members.dyndns.org, update.ods.org, members.dhs.org, www.dyns.cx, www.3322.org, www.no-ip.com.

Enable Dynamic DNS Service, and select DDNS server. Then enter the user name, password, and hostname.

\* For the information of DDNS service registration, please refer to the website of the DDNS providers.

### 3.3.12 MySQL Server

- MySQL Server

☒ Enable MySQL Server  
You can enable MySQL server as the website database.

☒ Enable TCP/IP Networking  
Enable this option to allow remote connection of MySQL server.

Port Number

The built-in web page applications of the system are as below (make sure you have enabled MySQL server and Web server)

- Click the link on the right to enter phpMyAdmin database management system  
<http://172.17.22.13:80/phpMyAdmin/>

☐ Database Maintenance  
You can reset the database password or re-initialize the database.

Apply

You can enable MySQL Server as the website database.

#### Enable TCP/IP Networking

You can enable this option to configure MySQL Server of the NAS as a database server of another web server in remote site through Internet connection. When you disable this option, your MySQL Server will only be configured as local database server for the web server of the NAS.

After enabling remote connection, please assign a port for the remote connection service of MySQL server. The default port is 3306.

After the first-time installation of the NAS, a folder phpMyAdmin is created in the Qweb network folder. You can enter `http://NAS IP/phpMyAdmin/` in the web browser to enter the phpMyAdmin page and manage the MySQL database.

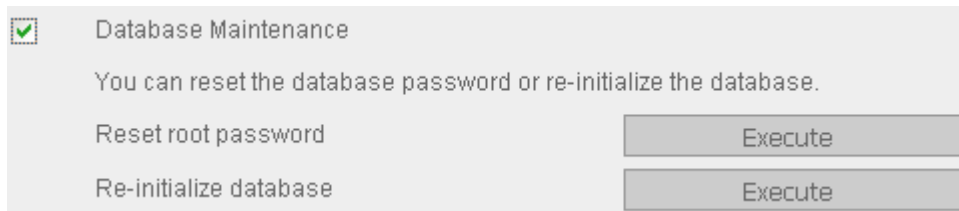
#### Note:

1. Please do not delete the phpMyAdmin folder. You can rename this folder but the link on the MySQL Server page will not be updated. To access the renamed folder, you can enter the link `http://NAS IP/renamed folder` in the web browser.
2. The phpMyAdmin folder is created after the first-time installation. When you update the firmware, the folder remains unchanged.



## Database Maintenance

Check the box "Database Maintenance" to select to reset the database password or initialize the database.



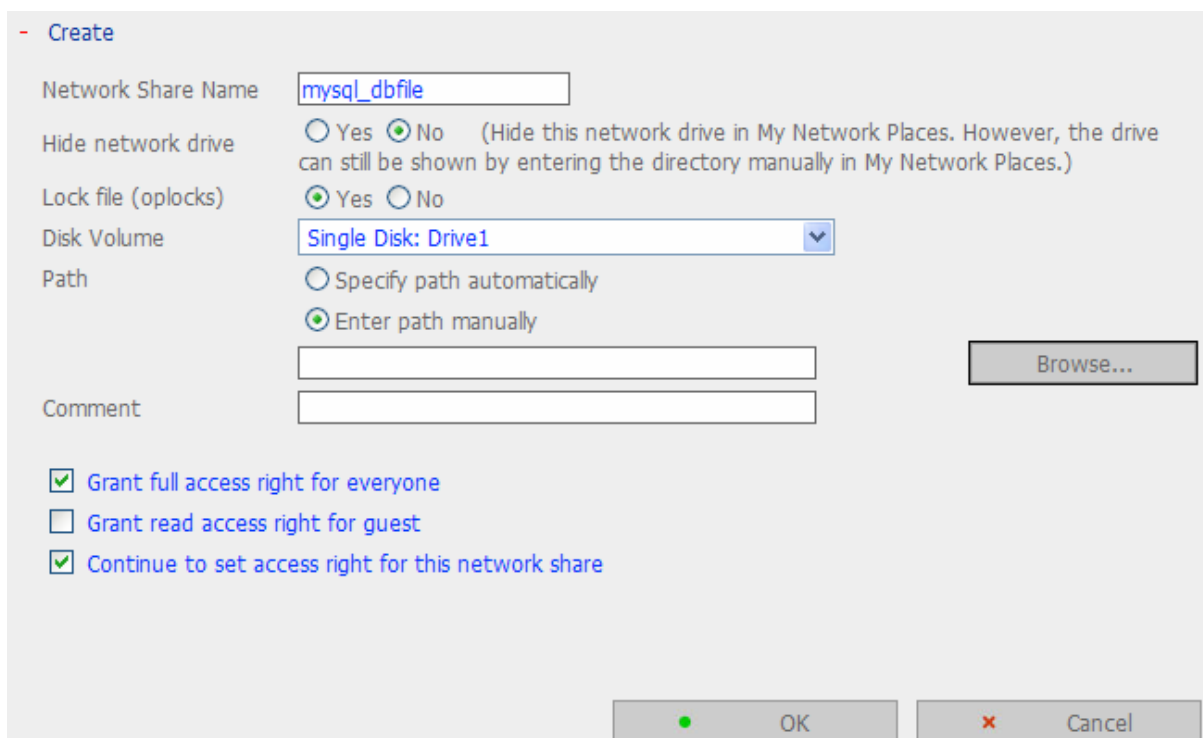
<input checked="" type="checkbox"/> Database Maintenance	
You can reset the database password or re-initialize the database.	
Reset root password	Execute
Re-initialize database	Execute

Reset root password: Execute this function to reset the password of MySQL root as "admin".

Re-initialize database: Execute this function to delete all the data on MySQL database.

## Description: File location of MySQL database

1. Create a network share in "Network Share Management".
2. Enter the network share name and select "Enter path manually". Then click "Browse..."



- Create

Network Share Name:

Hide network drive: ☐ Yes ☒ No (Hide this network drive in My Network Places. However, the drive can still be shown by entering the directory manually in My Network Places.)

Lock file (oplocks): ☒ Yes ☐ No

Disk Volume:

Path: ☐ Specify path automatically ☒ Enter path manually

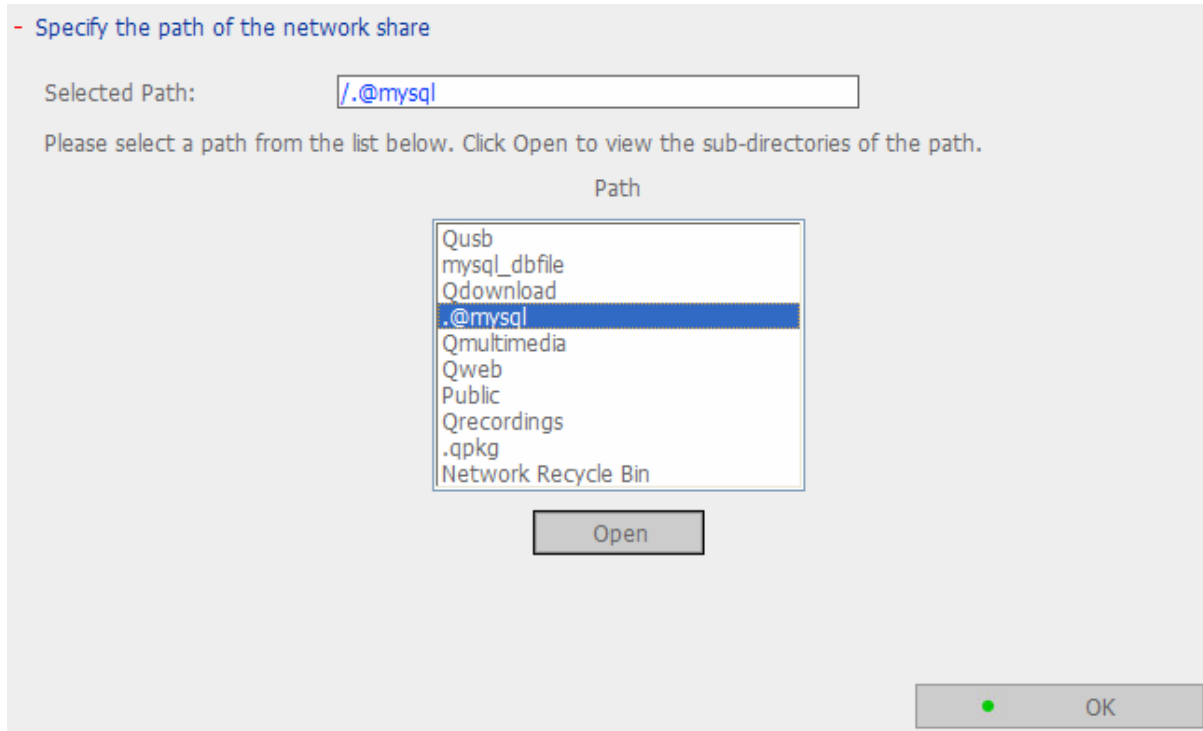
Comment:

☒ Grant full access right for everyone

☐ Grant read access right for guest

☒ Continue to set access right for this network share

3. Select `./@mysql` and click "OK". After the network share has been created, configure the access right. The network share name configured in the above step is the file location of MySQL database.



### 3.3.13 Surveillance Station

The Surveillance Station enables you to monitor and record the live video of the network cameras available on the network (LAN or WAN). To use this function, enable "Surveillance Station" in the "Network Settings" page.

Click on the link or enter the URL "http://NAS IP:8080/Qrecordings" in the web browser or click "Surveillance Station" on the login page to enter the Surveillance Station.

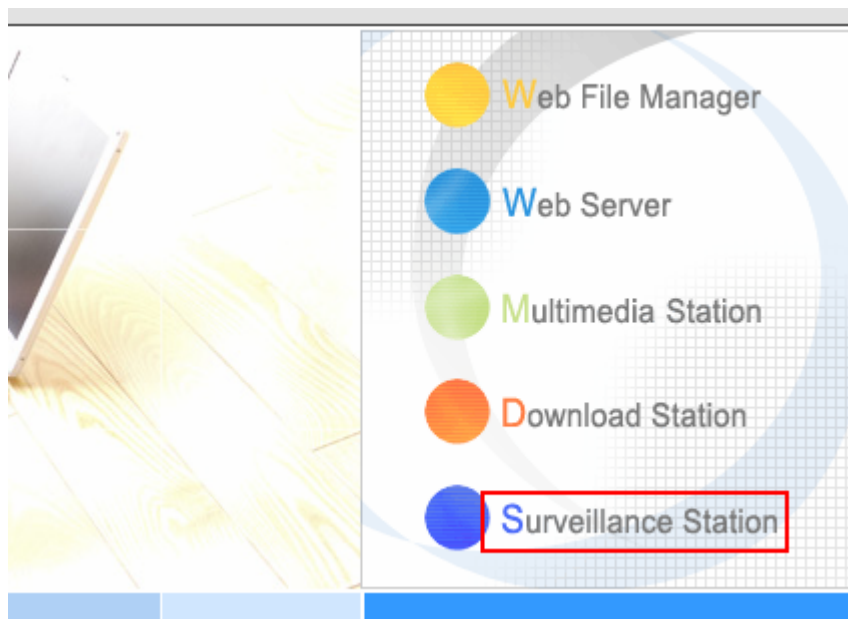
**Note:** The Surveillance Station is only supported on IE browser 6.0 or later.

— Surveillance Station

☒ Enable Surveillance Station  
After enabling this service, click the following link to enter to Surveillance Station.  
<http://172.17.21.125:8080/Qrecordings/>

☒ Display service link on the login page.

● Apply



To set up your network surveillance system by NAS, follow the steps below:

1. Plan your home network topology
2. Set up the IP Cameras
3. Configure the camera settings on NAS
4. Configure your NAT router (for remote monitoring over the Internet)

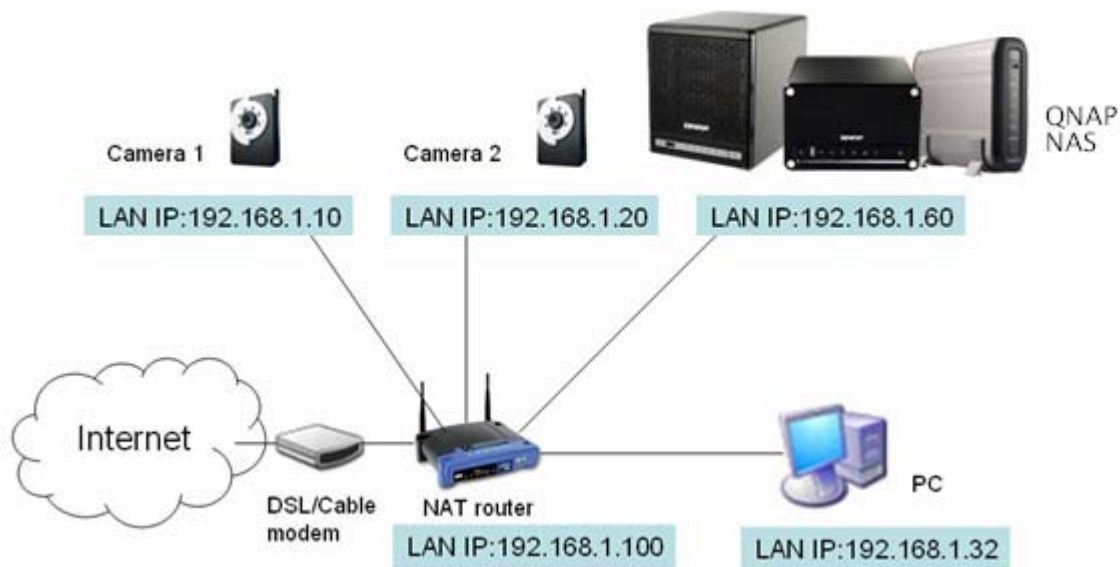
### 1. Plan your home network topology

Write down your plan of the home network before starting to set up the surveillance system. Consider the following when doing so:

- i. The IP address of NAS
- ii. The IP address of the cameras

Your computer, the NAS, and the IP cameras should be installed to the same router in LAN. Assign fixed IP addresses to the NAS and the IP cameras. For example,

- The LAN IP of the home router: 192.168.1.100
- Camera 1 IP: 192.168.1.10 (fixed IP)
- Camera 2 IP: 192.168.1.20 (fixed IP)
- NAS IP: 192.168.1.60 (fixed IP)



## 2. Set up the IP Cameras

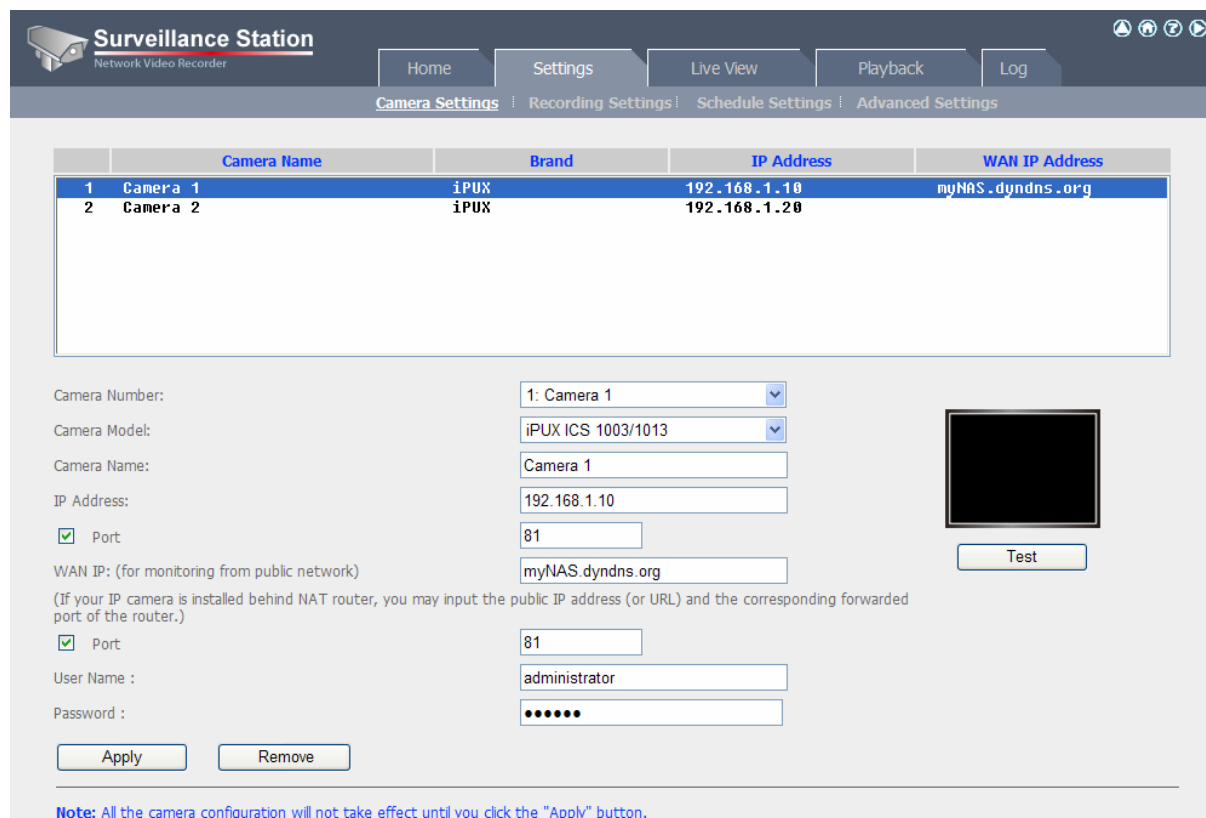
In this example, two IP cameras will be installed. Connect the IP cameras to your home network. Then set the IP address of the cameras so that they are in the same LAN as the computer. Login the configuration page of the Camera 1 by IE browser. Enter the IP address of the first camera as 192.168.1.10. The default gateway should be set as the LAN IP of the router (192.168.1.100 in this example). Then configure the IP address of the second camera as 192.168.1.20.

Some cameras provide a utility for IP configuration. You may refer to the user manual of the cameras for further details.

**\* Please refer to [www.qnap.com](http://www.qnap.com) for the supported network camera list.**

## 3. Configure the camera settings on NAS

Login the Surveillance Station by IE browser to configure the IP cameras. Go to "Settings>Camera Settings" page. Enter the camera information, e.g. name, model, and IP address.



	Camera Name	Brand	IP Address	WAN IP Address
1	Camera 1	iPUX	192.168.1.10	myNAS.dyndns.org
2	Camera 2	iPUX	192.168.1.20	

Camera Number: 1: Camera 1

Camera Model: iPUX ICS 1003/1013

Camera Name: Camera 1

IP Address: 192.168.1.10

☒ Port: 81

WAN IP: (for monitoring from public network) myNAS.dyndns.org

(If your IP camera is installed behind NAT router, you may input the public IP address (or URL) and the corresponding forwarded port of the router.)

☒ Port: 81

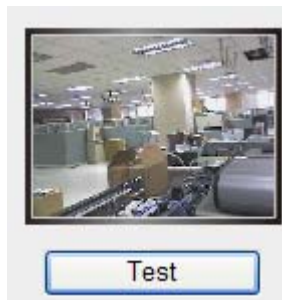
User Name : administrator

Password : .....

Apply Remove

**Note:** All the camera configuration will not take effect until you click the "Apply" button.

Click "Test" on the right to ensure the connection to the IP camera is successful.



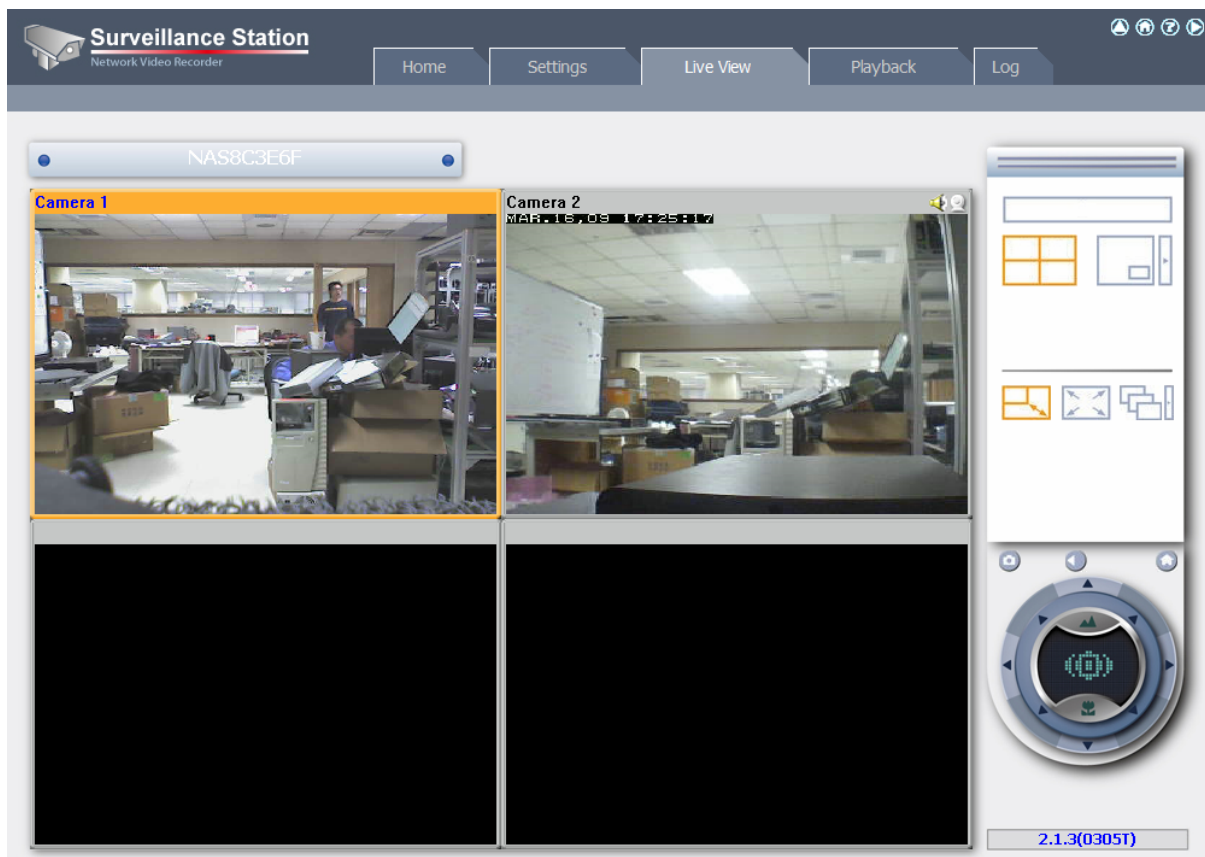
If your camera supports audio recording, you may enable the option in "Recording Settings" page. Click "Apply" to save the changes.

Camera Number:	2: Camera 2
Video Compression:	Motion JPEG
Resolution:	QVGA
Frame Rate:	20
Quality:	Normal
<input checked="" type="checkbox"/> Enable audio recording on this camera	
Estimated Storage Space for Recording: 6760 GB	
<input type="button" value="Apply"/>	

Configure the settings of Camera 2 following the above steps.

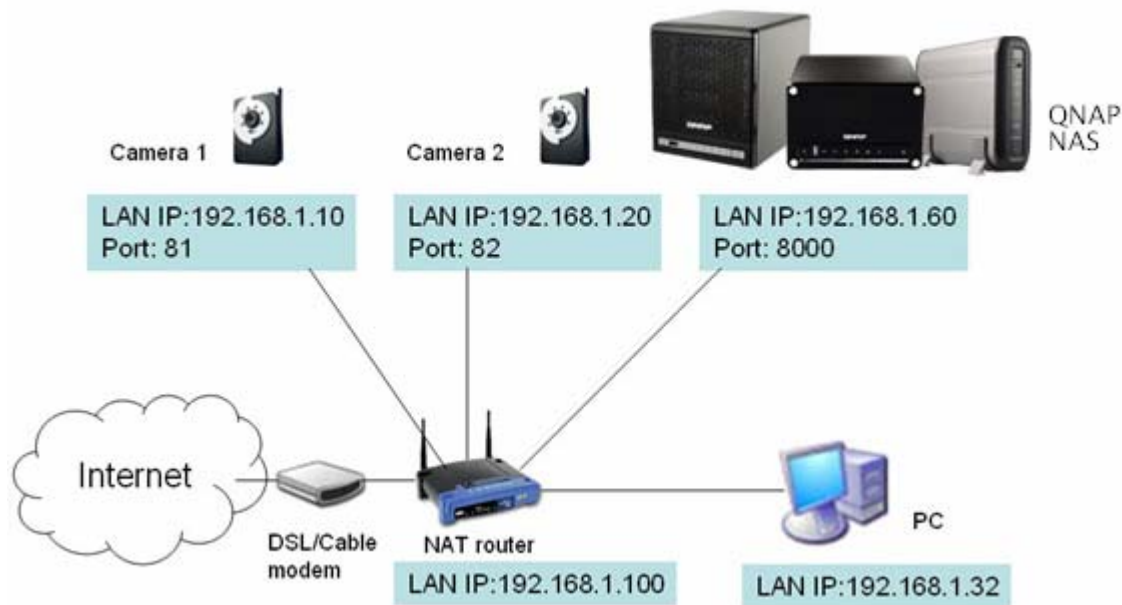
After you have added the network cameras to NAS, go to the "Live View" page. The first time you access this page by IE browser, you have to install the ActiveX control in order to view the images of Camera 1 and Camera 2. You can start to use the monitoring and recording functions of the Surveillance Station.

To use other functions of the Surveillance Station such as motion detection recording, schedule recording, and video playback, please refer to the online help.



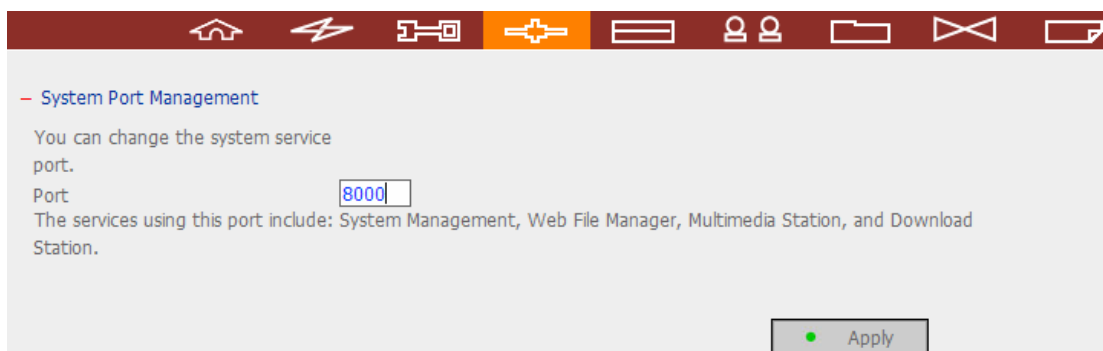
#### 4. Configure your NAT router (for remote monitoring over the Internet)

To view the monitoring video and access the NAS remotely, you need to change the network settings by forwarding different ports to the corresponding LAN IP on your NAT router.



#### Change the port settings of NAS and IP cameras

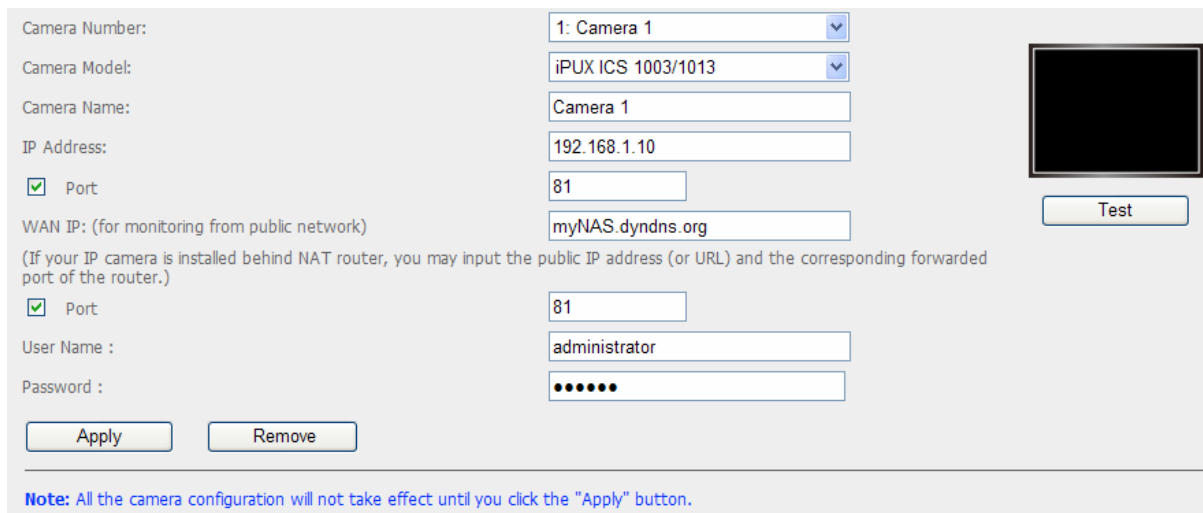
The default HTTP port of NAS is 8080. In this example, the port is changed to 8000. Therefore, you have to access the NAS via **http://NAS IP:8000** after applying the settings.



Then login the network settings page of the IP cameras. Change the HTTP port of Camera 1 from 80 to 81. Then change the port for Camera 2 from 80 to 82.



Next, login Surveillance Station. Go to "Settings>Camera Settings". Enter the port numbers of Camera 1 and Camera 2 as 192.168.1.10 **port 81** and 192.168.1.20 **port 82** respectively. Enter the login name and password for both cameras. Besides, enter the WAN IP address (or your domain address in public network, e.g. MyNAS.dyndns.org) and the port on the WAN side for the connection from Internet. After finishing the settings, click "Test" to ensure successful connection to the cameras.



Camera Number: 1: Camera 1

Camera Model: iPUX ICS 1003/1013

Camera Name: Camera 1

IP Address: 192.168.1.10

☒ Port 81

WAN IP: (for monitoring from public network) myNAS.dyndns.org

(If your IP camera is installed behind NAT router, you may input the public IP address (or URL) and the corresponding forwarded port of the router.)

☒ Port 81

User Name : administrator

Password : •••••

Apply Remove

**Note:** All the camera configuration will not take effect until you click the "Apply" button.

Go to the configuration page of your router and configure the port forwarding as below:

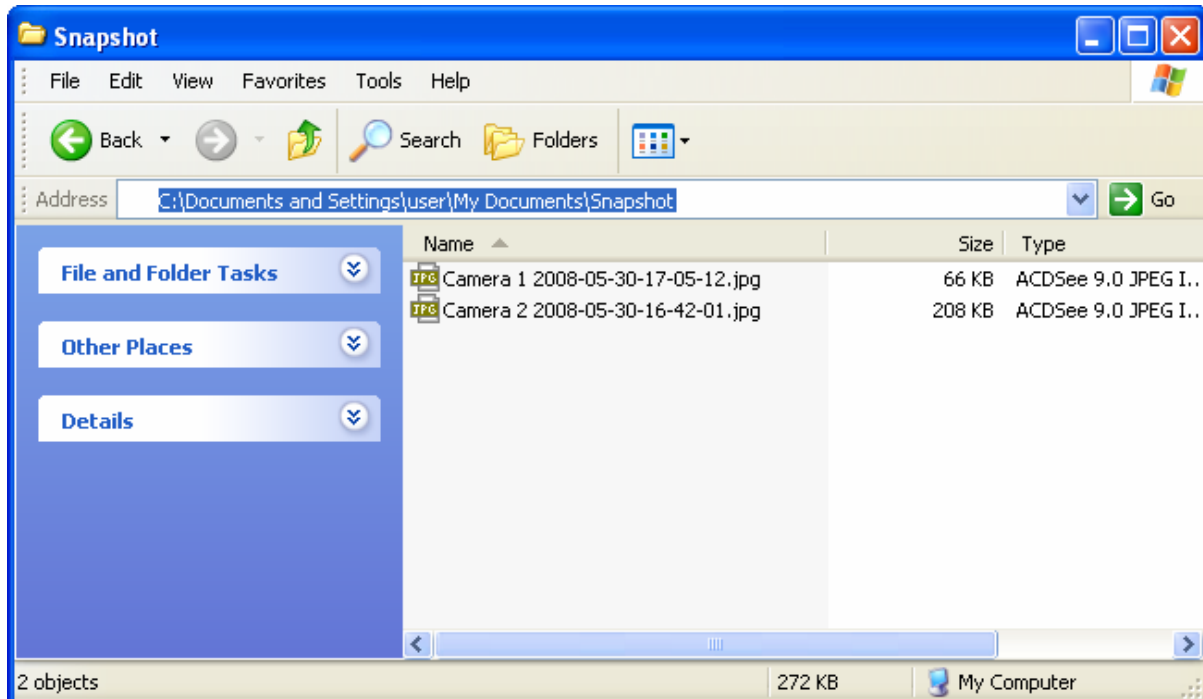
- Forward Port 8000 to NAS LAN IP: 192.168.1.60
- Forward Port 81 to Camera 1's LAN IP: 192.168.1.10
- Forward Port 82 to Camera 2's LAN IP: 192.168.1.20

**Note:** When you change the port settings, make sure remote access is allowed. For example, if your office network blocks port 8000, you will not be able to access your NAS from the office.

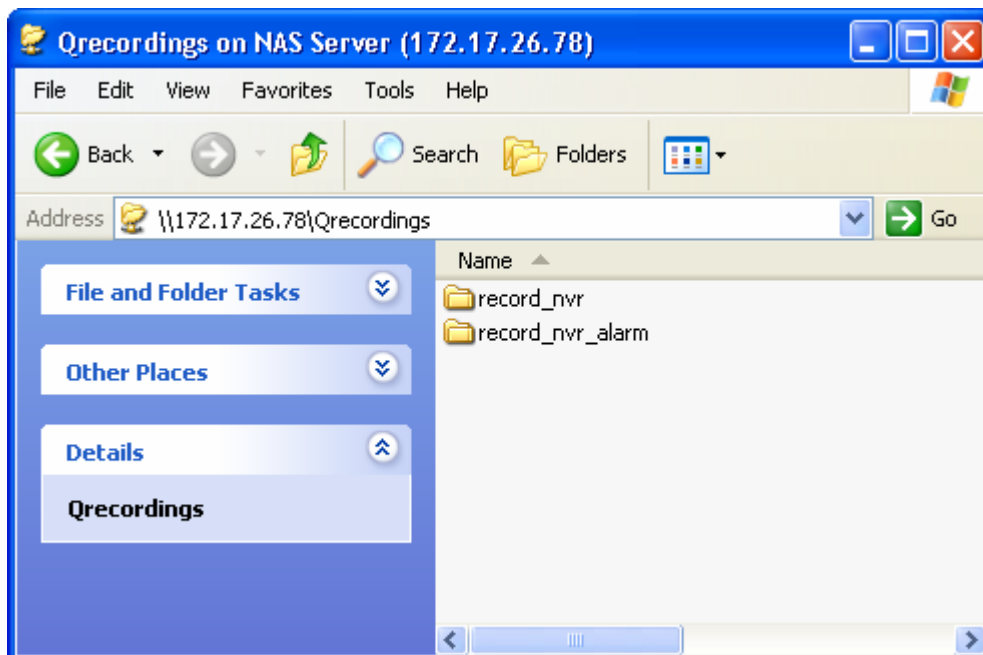
After you have configured the port forwarding and router settings, you can start to use the Surveillance Station for remote monitoring over the Internet.

## Access the snapshots and video recordings of Surveillance Station

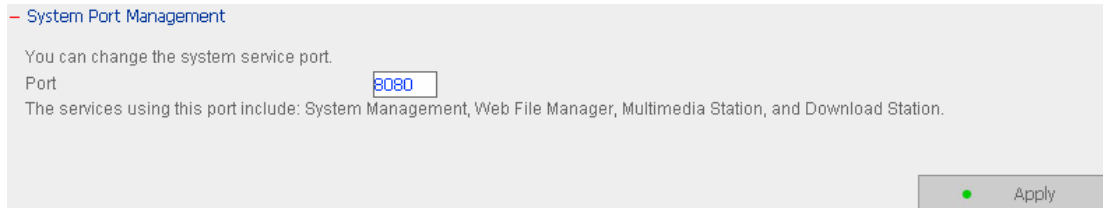
All snapshots taken are saved in the "Snapshot" folder under My Documents in your computer.



The video recordings will be saved in \\NASIP\Qrecordings. Normal recordings are saved in the folder "record\_nvr" and alarm recordings are saved in the folder "record\_nvr\_alarm" in the network share.



### 3.3.14 System Port Management



— System Port Management

You can change the system service port.

Port

The services using this port include: System Management, Web File Manager, Multimedia Station, and Download Station.

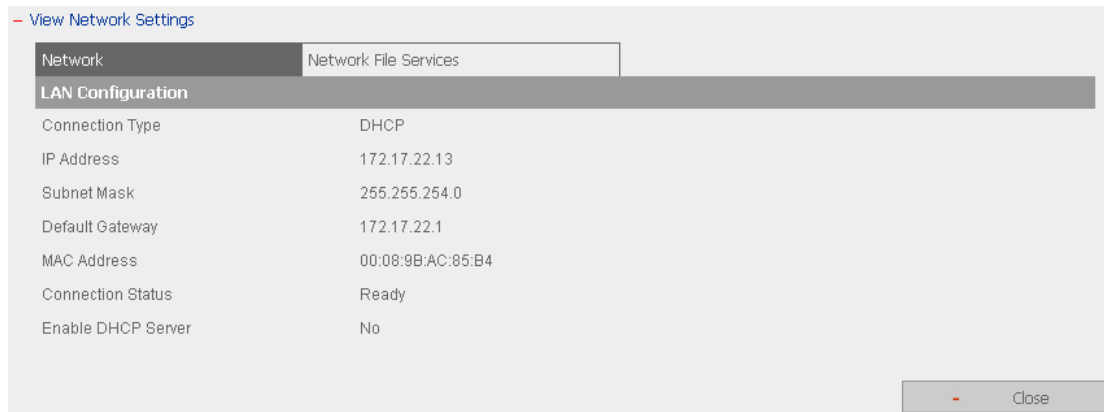
● Apply

Assign a port for the system management. The default port is 8080. The services of this port include: System Management, Web File Manager, Multimedia Station, and Download Station.

The system will restart after clicking “Apply”.

### 3.3.15 View Network Settings

You can view current network settings and status of the NAS in this section.



- View Network Settings

Network	Network File Services
<b>Microsoft Networking</b>	
Enabled	Yes
Server Type	Standalone Server
Workgroup	NAS
WINS server Enabled	No
Domain Master Enabled	No
<b>Apple Networking</b>	
Enabled	No
Apple Zone Name	*
<b>Unix/Linux NFS</b>	
Enabled	No
<b>Web File Manager</b>	
Enabled	Yes
<b>FTP Service</b>	
Enabled	Yes
Port Number	21
Max Connections	30
<b>Multimedia Station</b>	
Enable Multimedia Station	Yes
Enable iTunes Service	No
Enable UPnP MediaServer	Yes
<b>Download Station</b>	
Enabled	Yes
<b>Web Server</b>	
Enabled	No
Port Number	80
register_globals	off
<b>DDNS Service</b>	
Enabled	No
<b>MySQL Server</b>	
Enabled	No
Enable TCP/IP Networking	Yes
<b>Surveillance Station</b>	
Enabled	Yes
<b>System Port Management</b>	
Port Number	8080

- Close

## 3.4 Device Configuration

You can configure the SATA disk, iSCSI Target, external storage device, USB printer, etc. in this section.

The screenshot displays the 'Device Configuration' window. On the left, a sidebar lists 'SATA Disk', 'iSCSI Target', 'External Storage Device', and 'USB Printer'. The main area is titled 'SATA Disk' and features a 'New Disk Volume Configuration' section with a 'Single Disk Volume' option. Below this is the 'Current Disk Volume Configuration' section, which contains two tables: 'Physical Disks' and 'Logical Volumes'.

**Physical Disks**

Disk	Model	Capacity	Status	Bad Blocks Scan	SMART Information
Drive 1	Seagate ST380013AS 3.18	74.53 GB	Ready	<a href="#">Scan now</a>	Good

**Logical Volumes**

Volume	Total Size	Free Size	Status	Format	Check Disk	Delete Disk Volume
Single Disk: Drive 1	71.89 GB	71.71 GB	Ready	<a href="#">Format now</a>	<a href="#">Check now</a>	<a href="#">Remove now</a>

### 3.4.1 SATA Disk


This page shows the model, size, and current status of the SATA disk on the NAS. You can format and check disk, and scan bad blocks on the disk. When the SATA disk is formatted, the NAS will create the following default share folders:

- ✓ Public: Network share for file sharing
- ✓ Qdownload: Network share for Download Station
- ✓ Qmultimedia: Network share for Multimedia Station
- ✓ Qusb: Network share for data copy function via USB ports
- ✓ Qweb: Network share for Web Server
- ✓ Qrecordings: the default network share of Surveillance Station

To create a single disk volume, click the icon on the page.

SATA Disk

New Disk Volume Configuration

Single Disk Volume  
Create single disk volume(s).

Current Disk Volume Configuration

Physical Disks

Disk	Model	Capacity	Status	Bad Blocks Scan	SMART Information
Drive 1	Seagate ST3750330NS SN04	698.64 GB	Ready	<button>Scan now</button>	Good

Logical Volumes

Volume	Total Size	Free Size	Status	Format	Check Disk	Delete Disk Volume
Single Disk: Drive 1	686.20 GB	685.97 GB	Ready	<button>Format now</button>	<button>Check now</button>	<button>Remove now</button>

### 3.4.2 iSCSI Target

The NAS supports built-in iSCSI service. To use this function, follow the steps below:

1. Install an iSCSI initiator on your computer (Windows PC, Mac, or Linux).
2. Enable iSCSI Target Service on the NAS and create a new iSCSI target.
3. Run the iSCSI initiator and connect to the iSCSI target (NAS).
4. After successful logon, format the iSCSI target (disk volume). You can start to use the disk volume on the NAS as a virtual drive on your computer.

**Note:** The NAS supports 8 iSCSI devices at maximum.

– iSCSI Target

☒ Enable iSCSI Target Service

iSCSI Service Port:

☐ Enable iSNS:

iSNS Server IP:

● Apply

– iSCSI Target List

iSCSI Target Name	Capacity	Status	Action
-------------------	----------	--------	--------

Create New iSCSI Target



### 3.4.3 External Storage Device

The NAS supports external storage device, e.g. USB disk or eSATA disk for storage expansion or Q-RAID 1 function. You can select one of the following settings for the external drive:

- a. Data Sharing: Use the external drive for storage expansion.
- b. Q-RAID 1: Configure the external drive and the local hard drive on the NAS as Q-RAID 1. Q-RAID 1 enables one-way data synchronization from the NAS to the external storage device.

When Q-RAID 1 is executed once, the NAS data is automatically copied to the external storage device whenever it is connected to the NAS. There is no need to configure the settings in administration interface. Manual operation is required for the first time backup to enhance secure data protection.

**Note:** Only one external hard disk can be set as Q-RAID 1 at one time.

External Storage Device

USBDisk1

Manufacturer:

Hitachi

Model:

HDP725025GLA380

Device Type:

USB 2.0

Total / Free size:

232.89 GB / 229.03 GB

File System:

EXT 3

Status:

Ready

Format As:

EXT 3

Format now

Eject:

Unmount partition

Remove device

To remove the hardware device, please click [Remove device]. When the system does not show the device anymore, you can remove it safely.

**Note:** Do NOT unplug the external storage device when it is in use.

Disk Usage Setting:

☒ Data Sharing

☐ Q-RAID 1

Apply

## Data recovery from the external storage device:

When the internal hard drive of the NAS fails, you can recover the data from the external disk if they have been previously configured as Q-RAID 1. Follow the steps below to recover the data from the external disk to the NAS.

1. Replace the failed SATA disk with a new one.
2. Format the new disk by clicking "Format now" in "Device Configuration" > "SATA Disk" page.
3. Connect the external disk to the NAS (the one previously used for Q-RAID 1).
4. Go to "Device Configuration" > "External Storage Device" page. Click "Recover Data"\* under "Disk Usage Setting". All the data on the external disk will be recovered to the new internal hard drive.

\*This button appears when all the following conditions are met:

- a. The internal hard drive on the NAS and the connected external storage device have been configured as Q-RAID 1.
- b. The internal hard drive has been changed or the connected external storage device is configured as Q-RAID 1 on another NAS.
- c. No other Q-RAID1 disk is currently running on the NAS.

External Storage Device

USBIDisk1

Manufacturer: Hitachi  
Model: HDP725025GLA380  
Device Type: USB 2.0  
Total / Free size: 232.89 GB / 227.55 GB  
File System: EXT 3  
Status: Q-RAID 1 disk unmatched  
Format As: EXT 3  
Format now  
Unmount partition  
Remove device

To remove the hardware device, please click [Remove device]. When the system does not show the device anymore, you can remove it safely.  
**Note: Do NOT unplug the external storage device when it is in use.**

Disk Usage Setting:  
☐ Data Sharing  
☒ Q-RAID 1  
Recover Data  
Apply

### 3.4.4 USB Printer

To provide printer sharing function for the network users, you can simply connect a USB printer to the USB port of the NAS. The NAS detects the printer automatically. Up to 3 printers are supported.



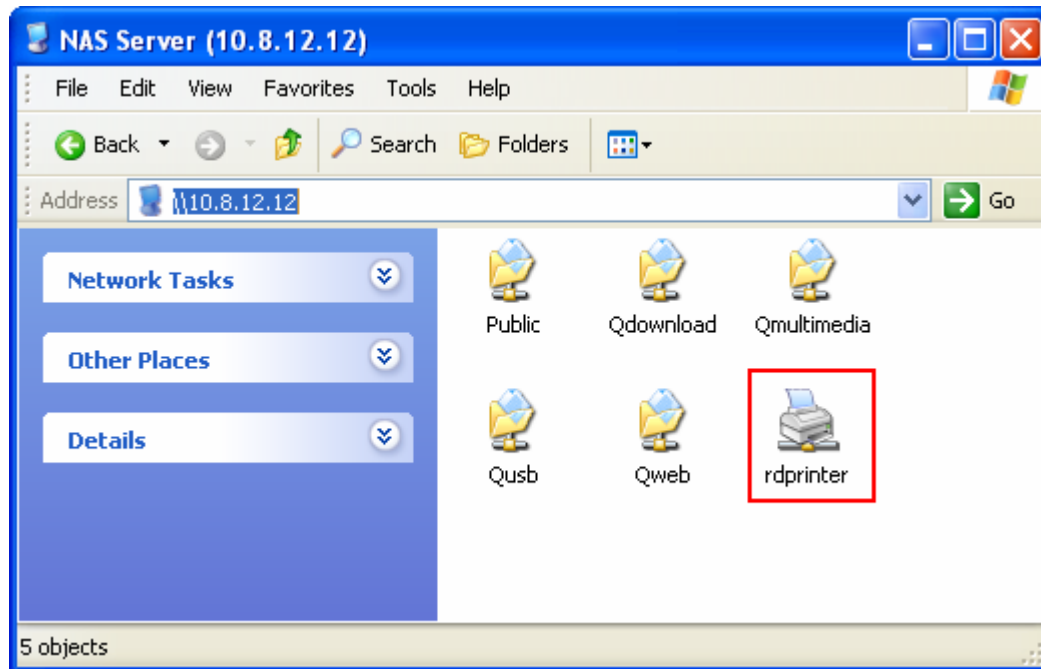
**Note:**

1. Please connect a USB printer to the server after the software configuration is completed.
2. The NAS does not support multifunction printer.
3. For the information of supported USB printer models, please visit <http://www.qnap.com>.

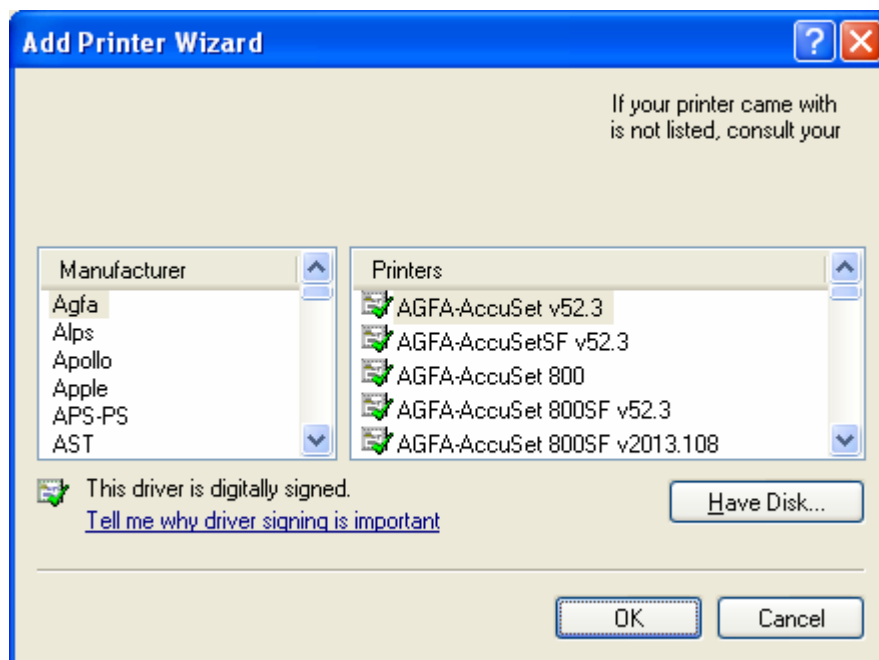
### 3.4.4.1 Windows XP Users

#### Method 1

1. Enter \\NAS IP in Windows Explorer.
2. A printer icon is shown as a network share on the server. Double click the icon.



3. Install the printer driver.



4. When finished, you can start to use the network printer service of the NAS.

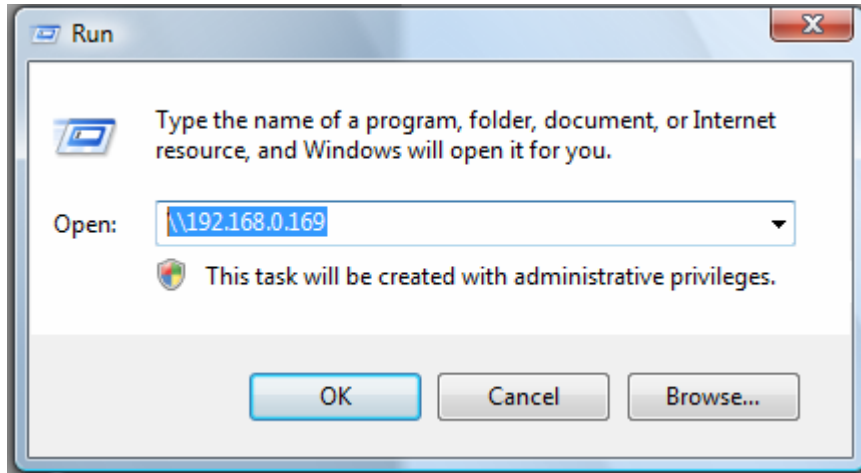
## Method 2

The following configuration method has been verified on Windows XP only:

1. Open "Printers and Faxes".
2. Delete the existing network printer (if any).
3. Right click the blank area in the Printers and Faxes window. Select "Server Properties".
4. Click the "Ports" tab and delete the ports configured for the previous network printer (if any).
5. Restart your PC.
6. Open Printers and Faxes.
7. Click "Add a printer" and click "Next".
8. Select "Local printer attached to this computer". Click "Next".
9. Click "Create a new port" and select "Local Port" from the drop-down menu. Click "Next".
10. Enter the port name. The format is \\NAS IP\NAS name**pr**, e.g. NAS IP= 192.168.1.1, NAS name= myNAS, the link is \\192.168.1.1\myNAS**pr**.
11. Install the printer driver.
12. Print a test page.

### 3.4.4.2 Windows Vista Users

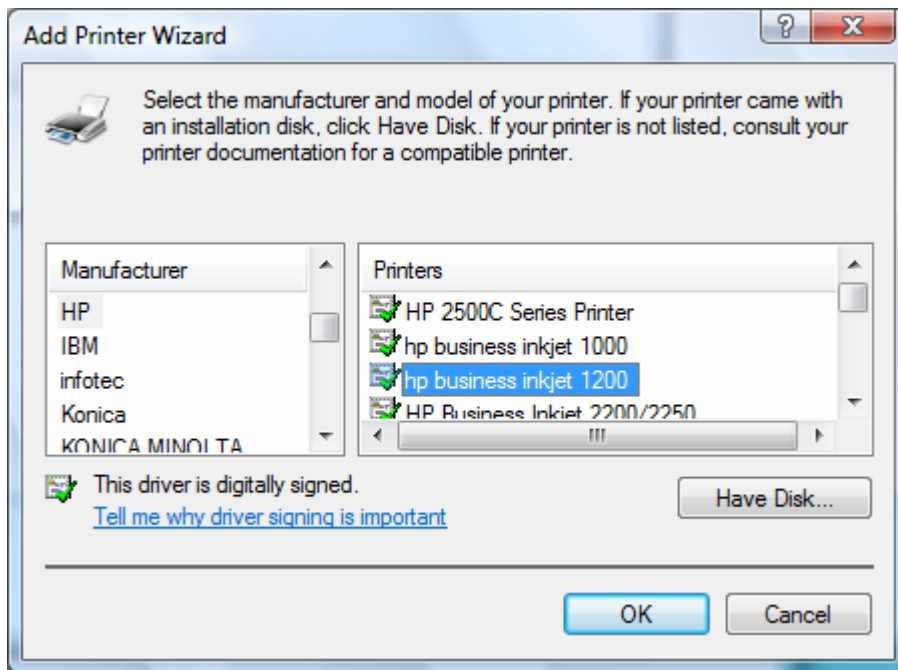
1. On the Run menu, enter \\NAS IP.



2. Find the network printer icon and double click it.



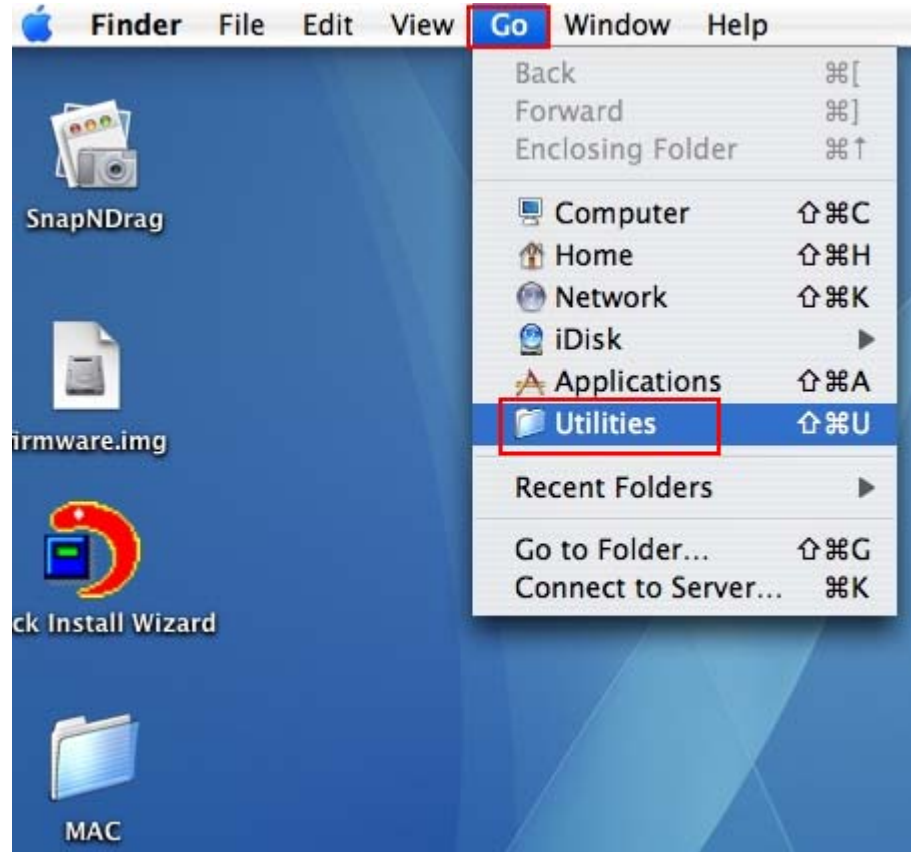
3. Install the correct printer driver.



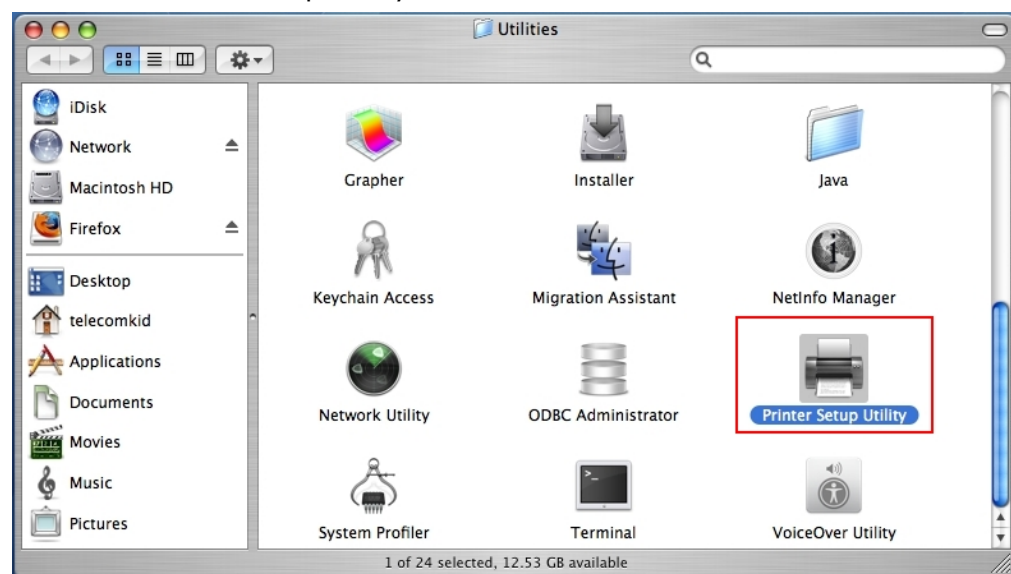
4. When finished, print a test page to verify the printer is ready to use.

### 3.4.4.3 Mac Users

1. On the toolbar, click "Go/ Utilities".

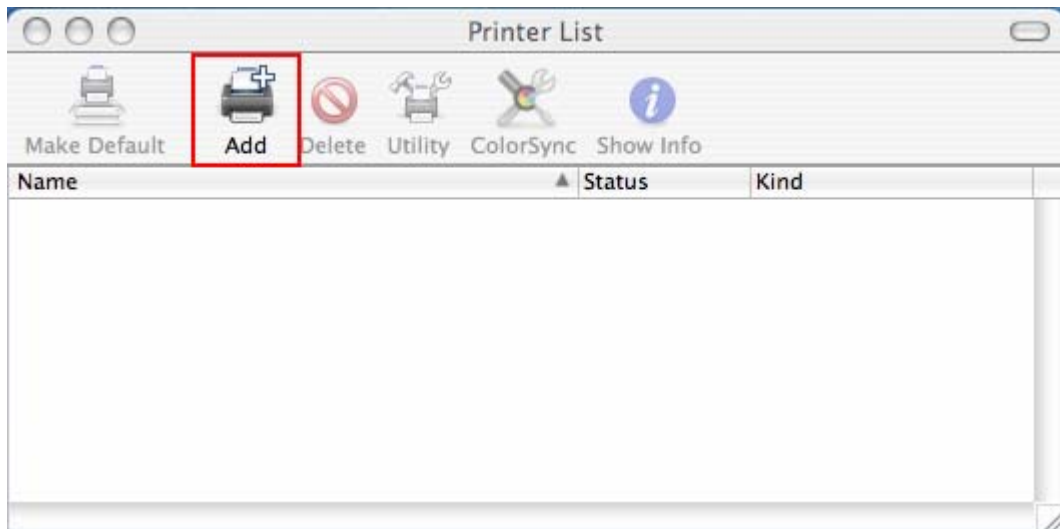



2. Click "Printer Setup Utility".

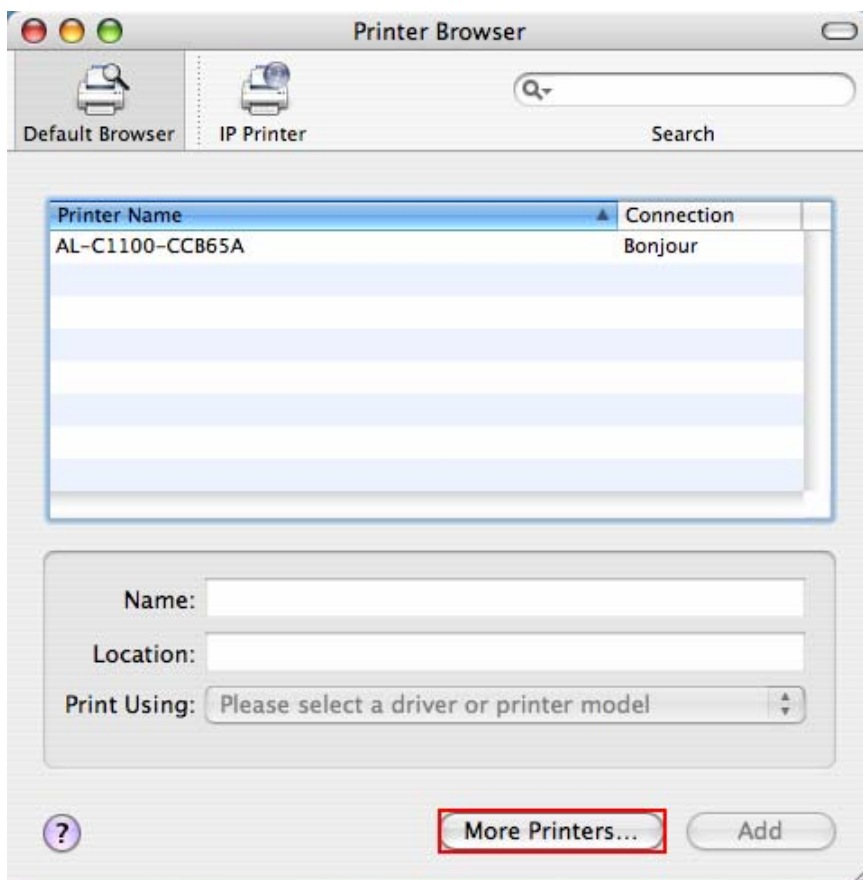




3. Click "Add".



4. Press and hold the "alt" key  on the keyboard and click "More Printers" concurrently.

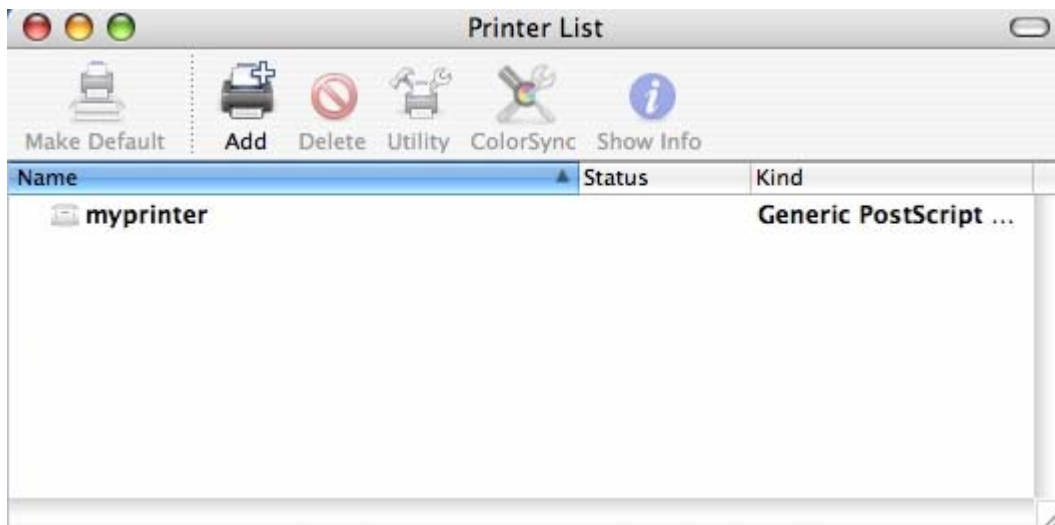


5. In the pop up window:
  - a. Select "Advanced"\*.  - b. Select "Windows Printer with SAMBA".  - c. Enter the printer name.  - d. Enter the printer URI, the format is smb://NAS IP/printer name. The printer name is found on the "Device Configuration" > "USB Printer page".  - e. Select "Generic" for Printer Model.  - f. Click "Add".



\*Note that you must hold and press the "alt" key and click "More Printers" at the same time to view the Advanced printer settings. Otherwise, this option does not appear.

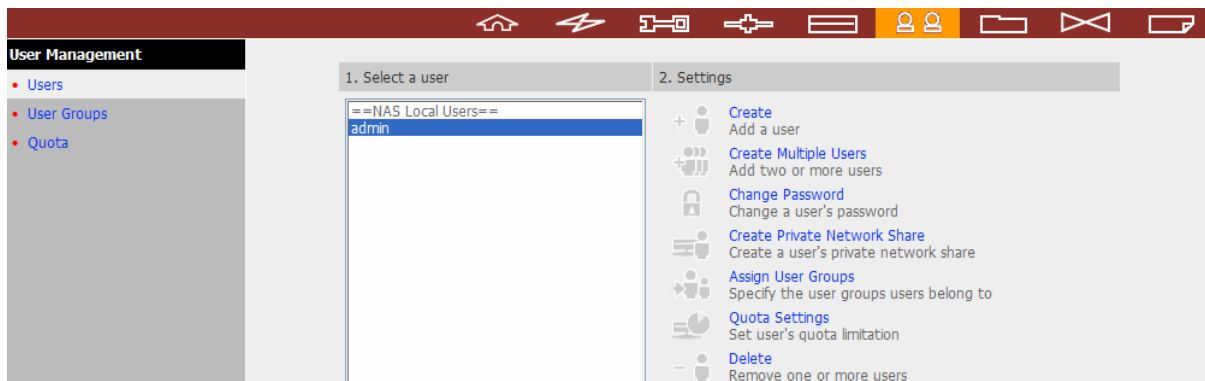
6. The printer appears on the printer list. It is ready to use.



**Note:** The network printer service of the NAS supports Postscript printer on Mac OS only.

## 3.5 User Management

The files on the NAS can be shared among multiple users. For easier management and better control of users' access right, you have to organize users, user groups and their access right control.



### 3.5.1 Users

The system has created the following users by default:

- **admin**  
By default, the administrator "admin" has access to system administration and cannot be deleted.
- **guest**  
This is a built-in user and will not be displayed on User Management page. A guest does not belong to any user group. The login password for guest is **guest**.
- **anonymous**  
This is a built-in user and will not be displayed on User Management page. When you connect to the server by FTP service, you can use this name to login as a guest.

**2048 users can be created at maximum** (including system default users). The following information is required to create a new user:

✓ **User name**

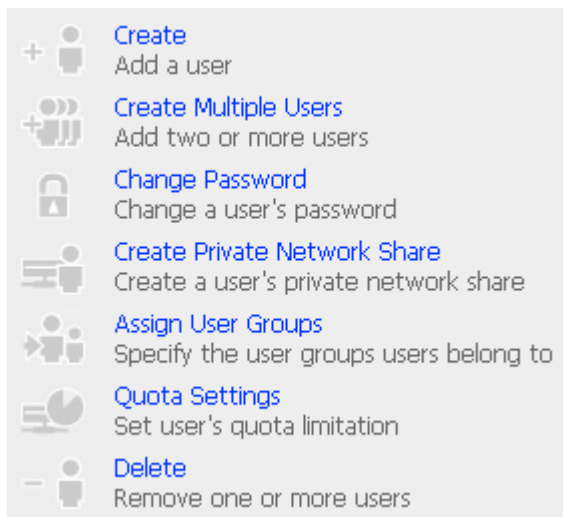
The user name must not exceed 32 characters. It is case-insensitive and supports double-byte characters, such as Chinese, Japanese, and Korean except:

" / \ [ ] : ; | = , + \* ? < > ` '

✓ **Password**

The password is case-sensitive and can be 16 characters long at maximum. It is recommended to use a password of at least 6 characters.

You can perform the following settings for users:



### 3.5.1.1 Create user

To create a user, click "Create" and enter the user name and password.

The 'Add a user' dialog box contains the following elements:

- Title: **Add a user**
- Fields:
  - User Name:
  - Password:
  - Verify Password:
- Note: **Note:** For increased security, password should be at least 6 characters.
- Checkbox: ☒ Continue to set the user groups to which this user belongs
- Buttons:  and

You can continue to assign the user groups that the user belongs to. Click "Close" to exit.

The 'Specify the user groups users belong to' dialog box contains the following elements:

- Title: **Specify the user groups users belong to**
- Left Panel: **User groups which user01 belongs to**
  - List: everyone
- Right Panel: **User groups which user01 doesn't belong to**
  - List: administrators, beta
- Buttons:  (with left arrow) and  (with right arrow)
- Close Button:

### 3.5.1.2 Create Multiple Users

The NAS enables you to create multiple users at one time. Click "Create Multiple Users". Enter the name prefix, e.g. test. Enter the start number for the user name, e.g. 0001 and the number of users to be created, e.g. 10. The NAS creates ten users named test0001, test0002, test0003...test0010. The password entered here is the same for all new users. You can change the password in the "User Management > Users" page.

- Add two or more users

User Name Prefix	<input type="text" value="test"/>
User Name Start No.	<input type="text" value="0001"/>
User Number	<input type="text" value="0010"/>
Password	<input type="password" value="•••••"/>
Verify Password	<input type="password" value="•••••"/>

☒ Create Private Network Share

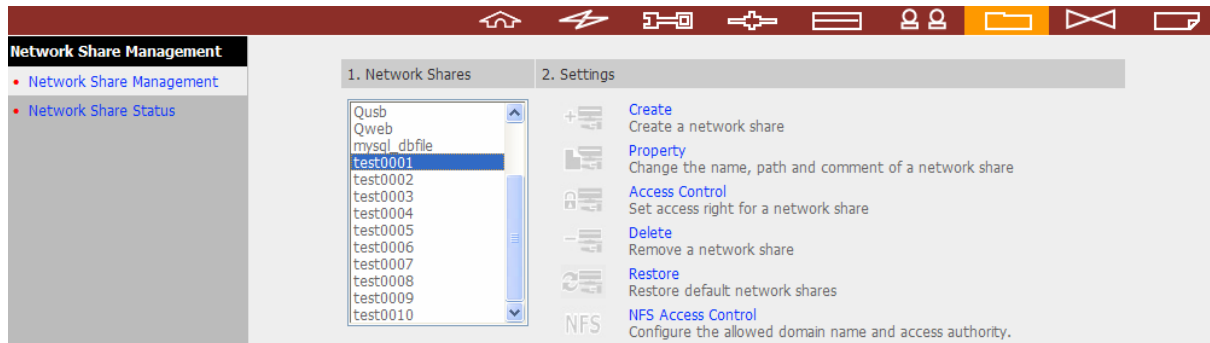
Hide network drive ☐ Yes ☒ No (Hide this network drive in My Network Places. However, the drive can still be shown by entering the directory manually in My Network Places.)

Disk Volume

**Note:** For increased security, password should be at least 6 characters.

1. Select a user	2. Settings
<div>==NAS Local Users==</div> <div>admin</div> <div>test0001</div> <div>test0002</div> <div>test0003</div> <div>test0004</div> <div>test0005</div> <div>test0006</div> <div>test0007</div> <div>test0008</div> <div>test0009</div> <div>test0010</div>	<div> <b>Create</b> Add a user</div> <div> <b>Create Multiple Users</b> Add two or more users</div> <div> <b>Change Password</b> Change a user's password</div> <div> <b>Create Private Network Share</b> Create a user's private network share</div> <div> <b>Assign User Groups</b> Specify the user groups users belong to</div> <div> <b>Quota Settings</b> Set user's quota limitation</div> <div> <b>Delete</b> Remove one or more users</div>

**Note:** When you check the option “Create Private Network Share” for creating multiple users, a network share named in the user name is created for each newly created user.





## 3.5.2 User Groups

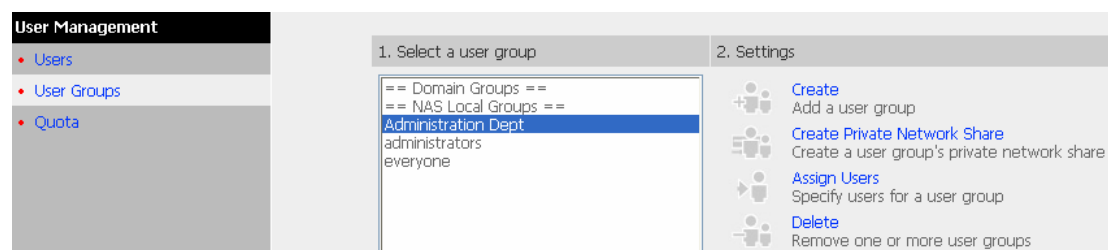
User group is a collection of users with the same access right to files or folders. The NAS has created the following user groups by default:

- **administrators**

All members in this group have administration right. You cannot delete this group.

- **everyone**

All registered users belong to everyone group. You cannot delete this group.



You can manage user groups with the following options:



**256 groups can be created at maximum.** A group name must not exceed 256 characters. It is case-insensitive and supports double-byte characters, such as Chinese, Japanese, and Korean, except the following ones:

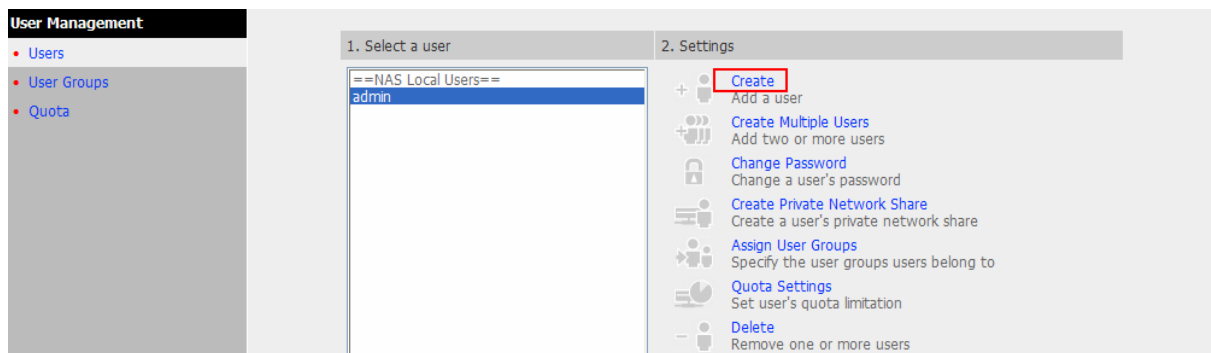
" / \ [ ] : ; | = , + \* ? < > ` '

## Create Users and Assign Users to User Group

The following example demonstrates how to create new users and assign users to a user group.

ABC Company has recently recruited two employees Jones Lee for Administration Department and Jane Wu for Sales Department. The IT Department therefore needs to create two user accounts for them to access company data on the NAS.

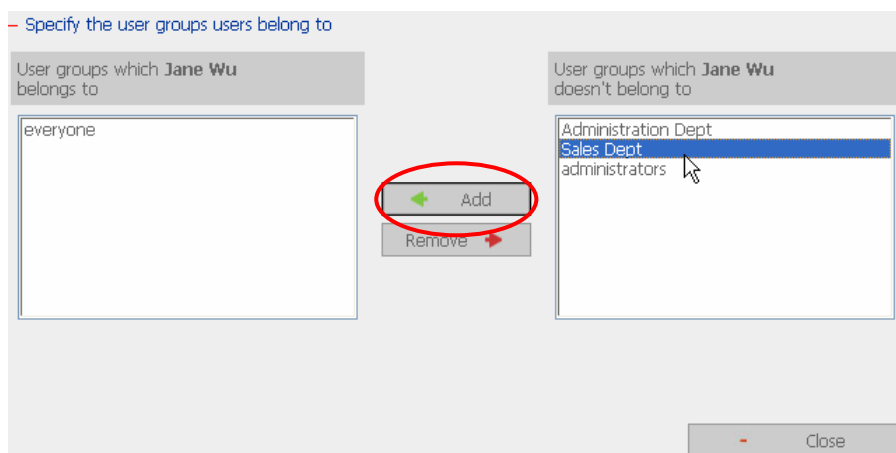
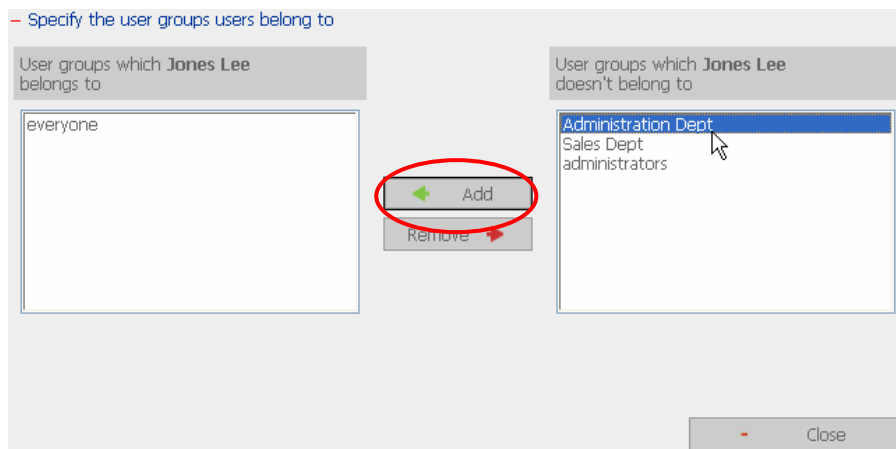
- i. To create a user account, go to User Management-Users. Click "Create".



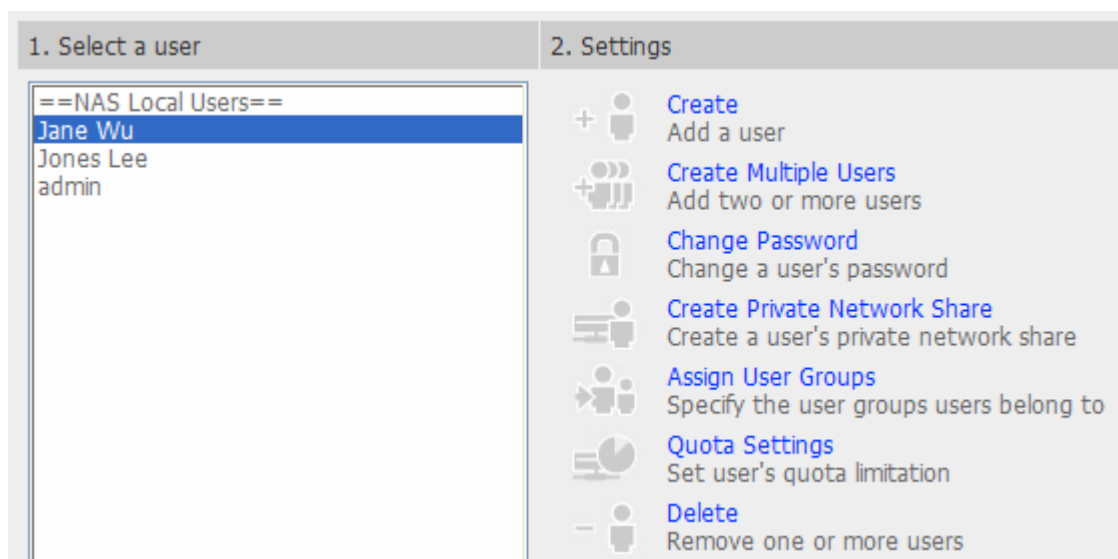
- ii. Enter the user name (Jones Lee/ Jane Wu) and password. Check the box "Continue to set the user groups to which this user belongs" and click "OK".

The first screenshot shows the 'Add a user' dialog box. It has fields for 'User Name' (containing 'Jones Lee'), 'Password' (masked with dots), and 'Verify Password' (masked with dots). Below these fields is a note: 'Note: For increased security, password should be at least 6 characters.' There is a checkbox labeled 'Continue to set the user groups to which this user belongs' which is checked. At the bottom, there are 'OK' and 'Cancel' buttons. The second screenshot is identical to the first, but the 'User Name' field contains 'Jane Wu'.

- iii. Select the user groups the users belong to on the right list, i.e. Jones Lee for Administration Dept and Jane Wu for Sales Dept, and click "Add". Then click "Close".



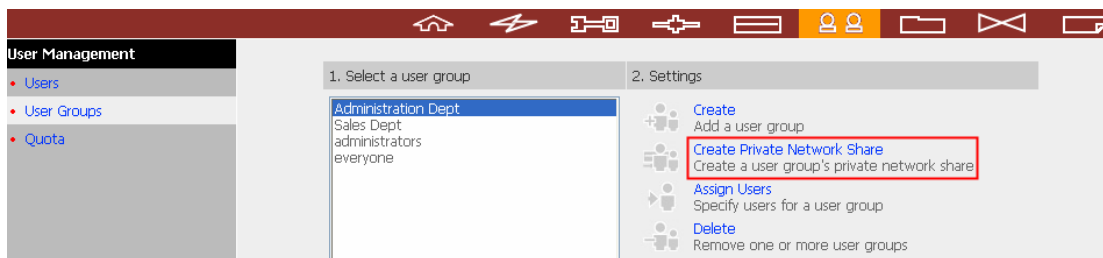
- iv. The user names will appear on the list on Create User Page.



## Create Private Network Share for User Groups

You can create particular network share for each user group. The procedure is described as below:

1. To create a network share called "media" accessible by Administration Department only, please go to "User Management—User Groups" page. Select the user group Administration Dept and click "Create Private Network Share" on the right.

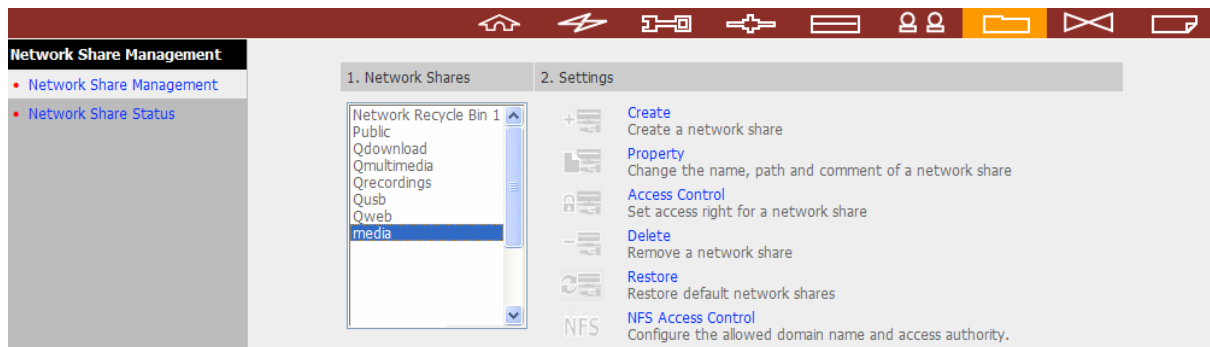


2. Enter the network share name "media". Select the disk volume that the share will be created in and specify the path automatically or manually. Enter the comment for the network share, e.g. media folder for Admin Dept and click "Apply".

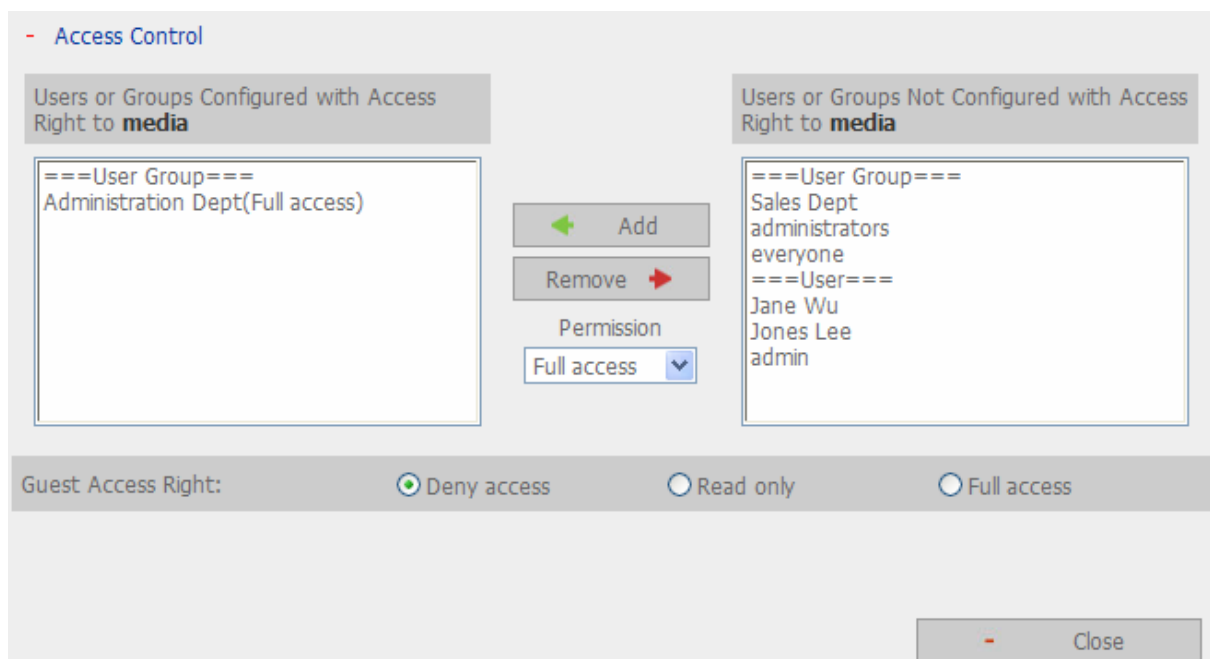
– Enter new network share's name, volume and path. Only users that are the members of Administration Dept user group can access this network share.

Network Share Name	<input type="text" value="media"/>
Hide network drive	<input type="radio"/> Yes <input checked="" type="radio"/> No (Hide this network drive in My Network Places. However, the drive can still be shown by entering the directory manually in My Network Places.)
Lock file (oplocks)	<input checked="" type="radio"/> Yes <input type="radio"/> No
Disk Volume	<input type="text" value="Single Disk: Drive1"/>
Path	<input checked="" type="radio"/> Specify path automatically <input type="radio"/> Enter path manually
	<input type="text" value=""/> <input type="button" value="Browse..."/>
Comment	<input type="text" value="media folder for admin Dept"/>

3. You can see the folder "media" in "Network Share Management" page.



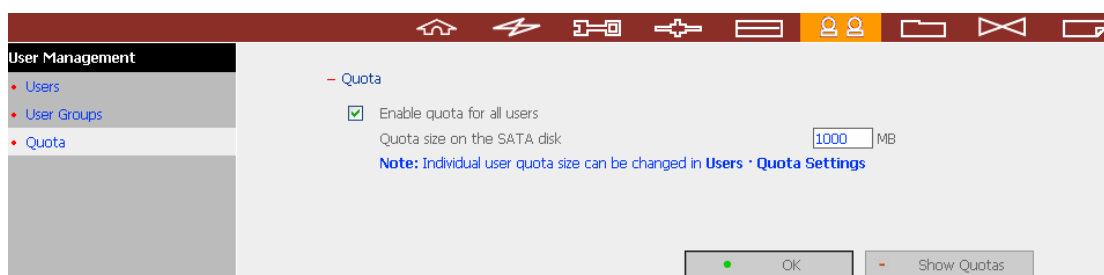
4. Enter Access Control. You can see that only Administration Dept has full access right to the folder.



### 3.5.3 Quota

To allocate disk volume efficiently, you can specify the quota that can be used by each user. When this function is enabled and a user has reached his/her disk quota, he/she cannot upload data to the server anymore. By default, no limitations are set for users. You can modify the following two options:

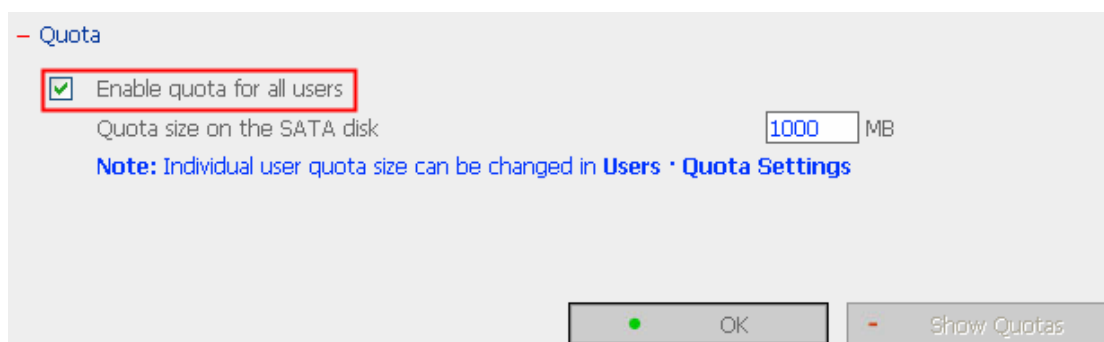
- i. Enable quota for all users
- ii. Quota size on each disk volume



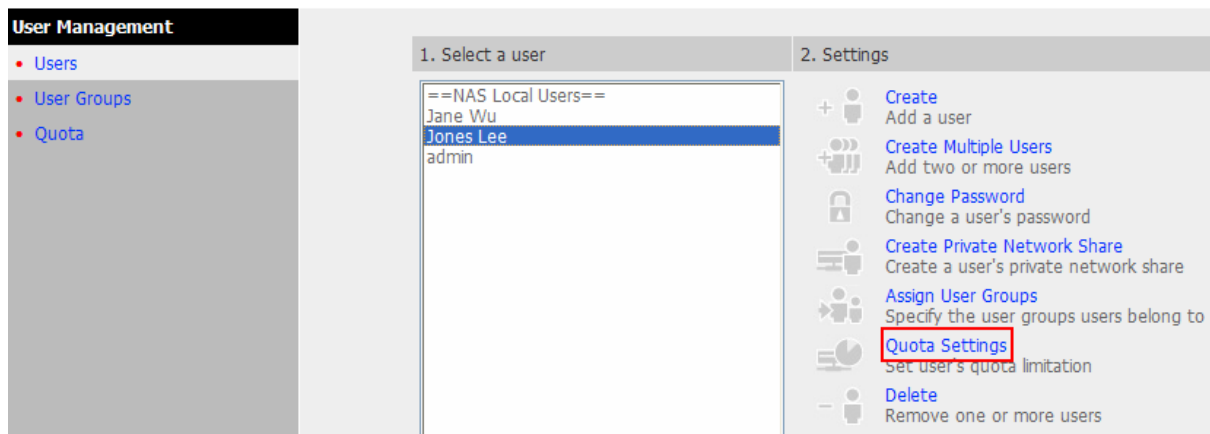
Please refer to the following example to configure the quota setting of users:

The IT department is planning to set the disk quota of Jones Lee from Administration Department and Jane Wu from Sales Department on the NAS. The disk quota is 2000MB for Jones Lee and 4000MB for Jane Wu.

1. Please go to "User Management" > "Quota" page to enable quota for all users. Enter the quota size on each disk volume, e.g. 1000MB. The quota for individual user can be modified later.



2. Select Jones Lee on User page and click "Quota Settings" on the right.



3. Enter the quota size 2000MB and click "OK".

— Quota status for user **Jones Lee**

Volume	Quota Size	Used Size	Status
Single Disk: Drive (Free Size: 149190.00 MB)	1000 MB	0.00 MB	Available 1000.00 MB

Set the quota size of **Jones Lee** on the SATA disk

☐ No limit ☒ Quota size:  MB

4. Follow the same steps and enter the quota size 4000MB for Jane Wu and click "OK".  
The quota setting is successfully applied.

— Quota status for user **Jane Wu**

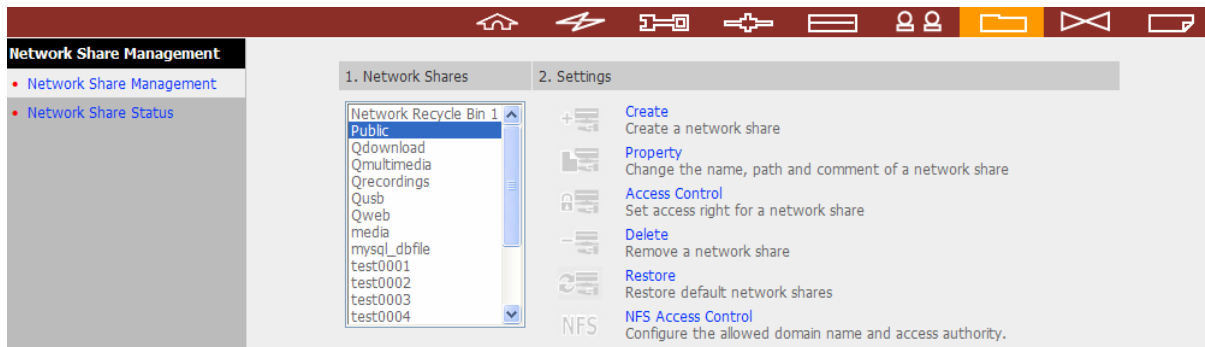
Volume	Quota Size	Used Size	Status
Single Disk: Drive (Free Size: 149190.00 MB)	1000 MB	0.00 MB	Available 1000.00 MB

Set the quota size of **Jane Wu** on the SATA disk

☐ No limit ☒ Quota size:  MB

## 3.6 Network Share Management

You can create network shares and assign the file access right to the users or user groups.



### 3.6.1 Network Share Management

#### 3.6.1.1 Create

To create a network share, enter the following information:

- ✓ Network share name  
The share name can be 32 characters long at maximum and cannot contain the following characters:  
**" . + = / \ : | \* ? < > ; [ ] %**
- ✓ Hide network drive  
Hide this network drive in My Network Places. However, the drive can still be shown by entering the directory manually in My Network Places.
- ✓ Lock file (oplocks)  
When "Yes" is selected, the oplock value of the network share in smb.conf is yes. If a user with write access opens a file in the network share by Microsoft network (samba) connection and another user opens the file in the same way, the file will become read-only to the latter user.  
When "No" is selected, the oplock value of the network share in smb.conf is no. Any users with write access can edit and save the files in the network share by Microsoft network (samba) connection.



✓ Path

All data is stored under the assigned path onto the disk volume. You can select "Specify path automatically" or assign a path manually. The path cannot exceed 256 characters and cannot contain the characters below:

" . + = / \ : | \* ? < > ; [ ] %

✓ Comment

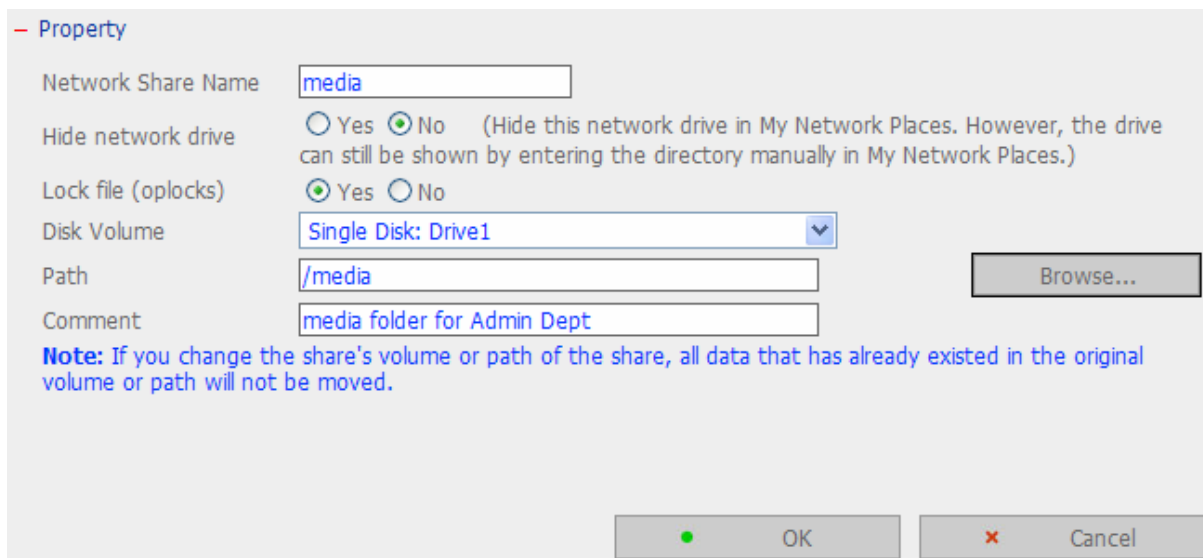
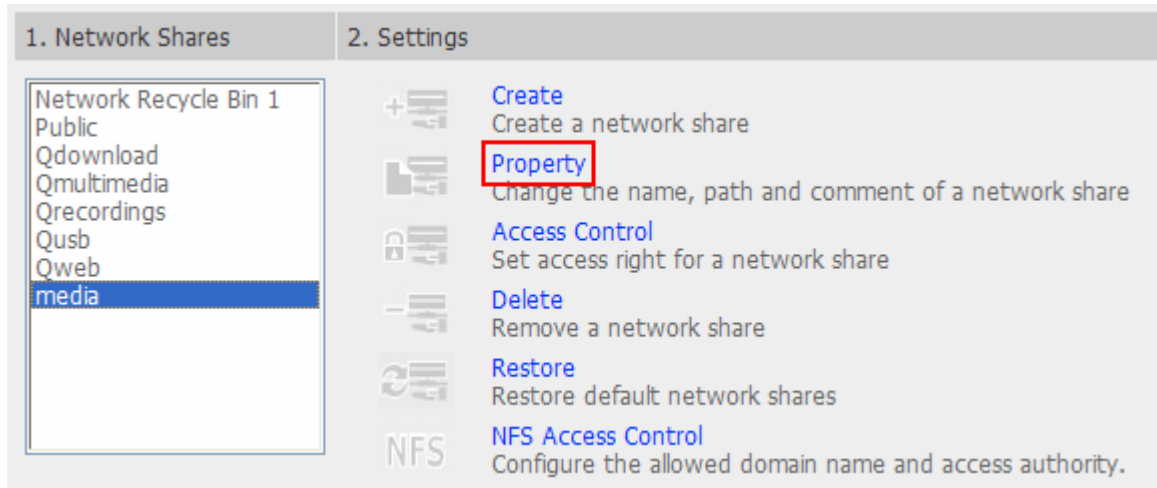
Enter a brief description for the share folder. The comment cannot exceed 128 characters.

The screenshot shows the 'Create' network share dialog box in Windows. It includes the following fields and options:

- Network Share Name:** An empty text box.
- Hide network drive:** Radio buttons for 'Yes' and 'No' (selected). A note states: "(Hide this network drive in My Network Places. However, the drive can still be shown by entering the directory manually in My Network Places.)"
- Lock file (oplocks):** Radio buttons for 'Yes' (selected) and 'No'.
- Disk Volume:** A dropdown menu showing 'Single Disk: Drive1'.
- Path:** Radio buttons for 'Specify path automatically' (selected) and 'Enter path manually'. Below these is an empty text box and a 'Browse...' button.
- Comment:** An empty text box.
- Permissions:** Three checkboxes: 'Grant full access right for everyone' (checked), 'Grant read access right for guest' (unchecked), and 'Continue to set access right for this network share' (checked).
- Buttons:** 'OK' and 'Cancel' buttons at the bottom right.

### 3.6.1.2 Property

To edit the property of an existing network share, select a share and click "Property". You can then edit the content of that share.



### 3.6.1.3 Access Control

When a network share is created, you can assign access rights to users or user groups:

- ✓ Deny access  
Access to the network share will be denied.
- ✓ Read only  
Users can read the files only on the network share.
- ✓ Full access  
Users can read, write, create, or delete files and folders on the network share.
- ✓ Enable write-only access on FTP connection  
When you enable this option, only the administration "admin" has read and write access to the share folder. Other users who have full access full access to the share folder will only be able to upload files to the folder via FTP connection but are unable to see the folder contents.

The screenshot shows the 'Access Control' dialog box for a network share named 'media'. It is divided into two main sections: 'Users or Groups Configured with Access Right to media' and 'Users or Groups Not Configured with Access Right to media'. The left section contains a list with '===User Group=== Administration Dept(Full access)'. The right section contains a list with '===User Group=== Sales Dept administrators everyone ===User=== Jane Wu Jones Lee admin'. Between these lists are buttons for 'Add' (green arrow), 'Remove' (red arrow), and a 'Permission' dropdown menu currently set to 'Full access'. Below these sections, there are radio buttons for 'Guest Access Right': 'Deny access' (selected), 'Read only', and 'Full access'. At the bottom, there is a checkbox for 'Enable write-only access on FTP connection' which is currently unchecked. A descriptive text below the checkbox states: 'When this option is enabled, only "admin" has read and write access to the network share. All other users with full access to the share folder originally will only be able to write the folder.' A 'Close' button is located in the bottom right corner.

— Access Control

Users or Groups Configured with Access Right to **media**

===User Group===  
Administration Dept(Full access)

Users or Groups Not Configured with Access Right to **media**

===User Group===  
Sales Dept  
administrators  
everyone  
===User===  
Jane Wu  
Jones Lee  
admin

← Add

Remove →

Permission  
Full access ▼

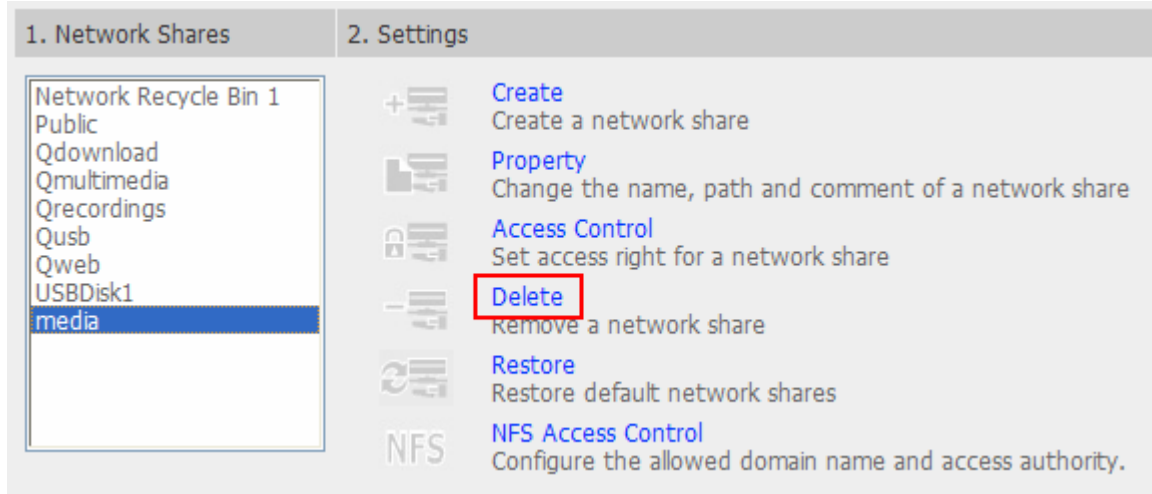
Guest Access Right: ☒ Deny access ☐ Read only ☐ Full access

☐ Enable write-only access on FTP connection  
When this option is enabled, only "admin" has read and write access to the network share. All other users with full access to the share folder originally will only be able to write the folder.

Close

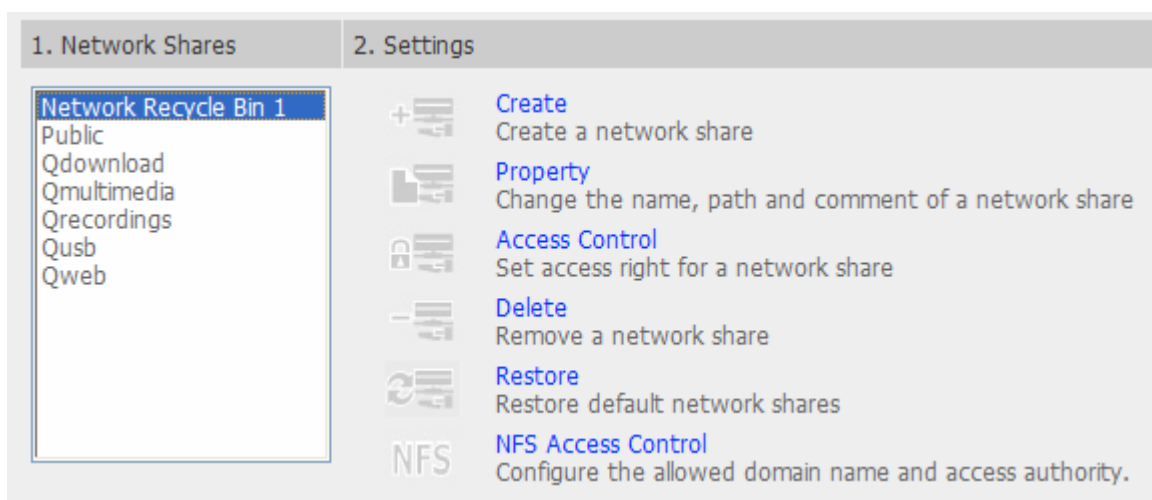
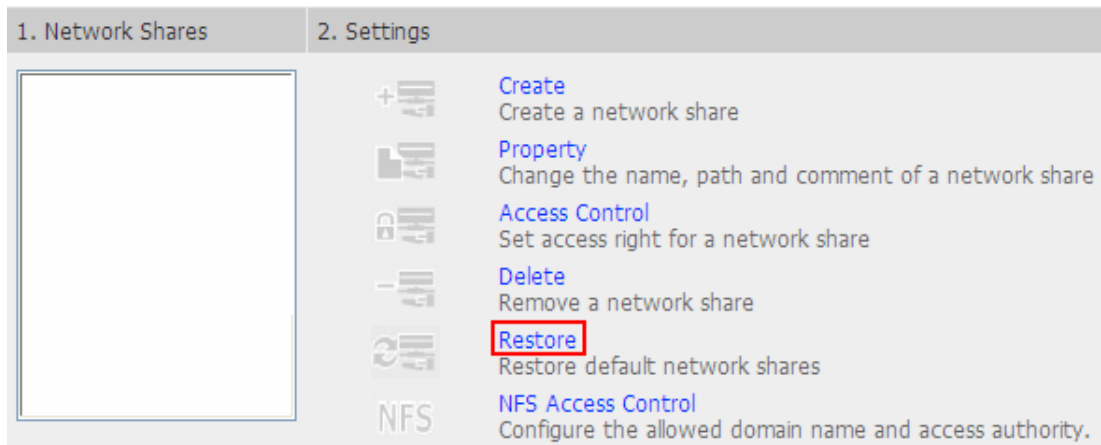
#### 3.6.1.4 Delete

Select a share and click "Delete". Click "OK" to confirm.



### 3.6.1.5 Restore

If the default network shares of the NAS are not created successfully, you can use the Restore function to restore the network shares. To do so, click "Restore" and the shares will be created.



### 3.6.1.6 NFS Access Control

You can set the NFS access right of the network share. The Public folder is for open access while access is denied for other default network shares. For detailed configuration, click the link "Click here for more detailed description".

NFS Access Control

You can set the NFS access right of the network share.

Network Share Name

Public

Access right

No limit

Allowed IP address or domain name:

Note: Please make sure the format you enter is correct. An incorrect format can lead to access error.








The allowed IP address or domain name can be a complete IP address or a domain name searchable by DNS. The IP addresses and domain names can be separated by comma (,). Wildcard characters "\*" and "?" are supported for domain names, e.g. \*.yourdomain.com. For further details. [Click here for more detailed description.](#)

OK

Cancel

### 3.6.2 Network Share Status

This page shows the status of the network share folders of the system including the storage capacity, number of folders and files etc. You can click on "Name", "Size", "No. of Folders", "No. of Files", or "Hidden" to sort the contents in ascending or descending order. To refresh the status report of a network share folder, click the icon at the end of row. The time for updating the information depends on the number of folders and files in the network share folder.

- Network Share Status						
Name	Size	No. of Folders	No. of Files	Hidden	Comment	
Network Recycle Bin 1	4.03 KB	0	1	No	[Single Disk Volume: Drive 1]	
Public	4 KB	0	0	No	System default share	
Qdownload	4 KB	0	0	No	System default share	
Qmultimedia	4 KB	0	0	No	System default share	
Qrecordings	4 KB	0	0	No	System default share	
Qusb	4 KB	0	0	No	System default share	
Qweb	4 KB	0	0	No	System default share	

## 3.7 System Tools

System Tools enable you to optimize the maintenance and management of the NAS.

The screenshot displays the 'System Tools' web interface. On the left is a sidebar menu with the following items: Alert Notification (selected), Auto Power on/off Management, Hardware Settings, UPS, Hard Disk SMART, System Update, USB one touch copy backup, Change Logo, Back up to an external storage device, Remote Replication, Backup/ Restore/ Reset Settings, IP Filter, Network Recycle Bin, Remote Login, QPKG, and Import SSL Secure Certificate. The main content area is titled 'Alert Notification' and contains the following settings:

- Alert Notification**  
When a system event occurs, an alert email will be sent automatically.
- Send system error alert by:
- Send system warning alert by:
- [Email Notification Settings]**  
E-mail address 1:   
E-mail address 2:   
☐ Send a test e-mail  
Note: The SMTP server must be configured first for alert mail delivery. [Click this to configure the SMTP server.](#)
- [SMS Notification Settings]**  
Country Code:   
Cell Phone No. 1: +93  (Do not enter the beginning "0".)  
Cell Phone No. 2: +93  (Do not enter the beginning "0".)  
☐ Send a test SMS message (If the SMSC settings are incorrect, you will not be able to receive the test message.)  
Note: You must configure the SMSC server to be able to send SMS notification properly. [Click here to configure the SMSC server.](#)

An 'Apply' button is located at the bottom right of the main content area.



### 3.7.1 Alert Notification

You can configure to receive instant SMS or email alert when a system error or warning occurs. Enter the email address and mobile phone number to receive the alerts. Make sure you have entered the correct SMTP server and the SMSC server settings. If you do not want to receive any alerts, select "No alert" for both settings.

- Alert Notification

When a system event occurs, an alert email will be sent automatically.

Send system error alert by: No alert

Send system warning alert by: No alert

[Email Notification Settings]

E-mail address 1:

E-mail address 2:

☐ Send a test e-mail

Note: The SMTP server must be configured first for alert mail delivery.[Click this to configure the SMTP server](#)

[SMS Notification Settings]

Country Code: Afghanistan (+93)

Cell Phone No. 1: +93 (Do not enter the beginning "0".)

Cell Phone No. 2: +93 (Do not enter the beginning "0".)

☐ Send a test SMS message (If the SMSC settings are incorrect, you will not be able to receive the test message.)

Note: You must configure the SMSC server to be able to send SMS notification properly. [Click here to configure the SMSC server.](#)

Apply

### 3.7.2 Auto Power on/ off Management

This section enables you to restart or shut down the server immediately, define the behavior of the server when the power resumes after a power outage, and set schedule for automatic system power on/ off/ restart.

You can select every day, weekdays, weekend, or any days of the week and set the time for automatic system power on, power off, or restart. Weekdays stand for Monday to Friday; weekend stands for Saturday and Sunday. Up to 15 schedules can be set.

- Auto Power on/off Management

Execute system restart/ shutdown immediately

Restart

Shut Down

When the AC power resumes:

☒ Resume the server to the previous power-on or power-off status.

☐ The server should remain off.

Set power on/ power off/ restart schedule

☒ Enable schedule

Shut Down

Daily

23

0

+

-

Turn on the server

Daily

7

0

+

-


Apply

### 3.7.3 Hardware Settings

You can enable or disable the hardware functions of the NAS.

- Hardware Settings

- ☒ Enable configuration reset switch
- ☒ Enable hard disk standby mode (if no access within 30 minutes Status LED will be off)
- ☒ Enable light signal alert when the free size of SATA disk is less than the value: 3072 MB
- ☒ Enable alarm buzzer (beep sound for error and warning alert)

 Apply

i. Enable configuration reset switch

You can press the reset button for 3 seconds to reset the administrator password and system settings to default. The IP Filter setting in "System Tools" will be restored to "Allow all connections".



ii. Enable hard disk standby mode

When this function is enabled, hard disk will go to standby mode if there is no access within the specified period. The status LED will be off in hard disk standby mode.

iii. Enable light signal alert when the free size of SATA disk is less than the value:

The Status LED indicator flashes red and green when this function is enabled and the free space of the SATA disk is less than the value. The range of the value is 1-51200 MB.

iv. Enable alarm buzzer

Enable this option. The system will sound when an error occurs.

### 3.7.4 UPS

If your UPS device provides USB interface, you can enable UPS (uninterruptible power supply) support to protect your system from abnormal system shutdown caused by power outage.

- UPS

☒ Enable UPS Support

☒ After the AC power fails for 5 minute(s), turn off the server.

☐ After the AC power fails for 2 minute(s), the server should enter standby mode. When the power resumes, the system resumes to the operation status.

UPS Model: USB UPS (auto detect) ▼

IP Address of UPS: 0 . 0 . 0 . 0

---

UPS Information

UPS Brand: --

UPS Model: --

AC Power Status: --

Battery Capacity: --

Estimated Protection Time: --

Refresh Apply

#### ✓ Enable UPS support

To activate the UPS support, you can select this option. You can set the shutdown timer to turn off the system automatically after the system detects the AC power is abnormal. In general, the UPS can keep supplying the power for the system for about 5~10 minutes, depending on the maximum load of the UPS and the number of the loads connected to it. You may also configure the system to enter standby mode in case of abnormal AC power supply.

#### ✓ UPS Model

Select the UPS model from the list. If the UPS model you are using is not available on the list, please contact our technical support.

#### ✓ IP Address of UPS

If you have selected APC UPS with SNMP for UPS model, enter the IP address of the UPS.

### 3.7.5 Hard Disk S.M.A.R.T.

This page enables users to monitor hard drive health, temperature, and usage status by the hard disk S.M.A.R.T. mechanism.

Select the hard drive and you can view the following information by clicking the corresponding buttons.

Field	Description
Summary	Displays the hard drive smart summary and the latest test result.
Hard disk information	Displays the hard drive details, e.g., model, serial number, drive capacity, etc.
SMART information	Displays the hard drive SMART information. Any items that the values are lower than the threshold are regarded as abnormal.
Test	To perform quick or complete hard drive SMART test and display the results.
Settings	To configure temperature alarm. When the hard drive temperature is over the preset values, the system records error logs. You can also configure quick and complete test schedule. The latest test result is shown in the Summary page.

[Monitor hard disk health, temperature, and usage status by the hard disk S.M.A.R.T. mechanism.](#)

Summary

Hard Disk Information

SMART Information

Test

Settings

**Normal**

The hard disk was detected not to be in the best status. Your hard disk should be operating properly.

Hard disk model	Seagate Barracuda 7200.7 and 7200.7 Plus family
Drive capacity	74.53 GB
Hard drive health	Normal
Hard drive temperature	55 °C
Test time	---
Test result	Not tested

### 3.7.6 System Update

- System Update

**Note:** If the system is running properly, you do not need to update the firmware.

Current firmware version: 2.1.1 Build 0210T

Before updating system firmware, please make sure the product model and firmware version are correct. Follow the steps below to update firmware:

Step 1: Download the release notes of the same version as the firmware from QNAP website <http://www.qnap.com/> Read the release notes carefully to make sure you need to update the firmware.

Step 2: Before updating system firmware, back up all disk data on the server to avoid any potential data loss during system update.

Step 3: Click the **[Browse...]** button to select the correct firmware image for system update. Click the **[Update System]** button to update the firmware.

**Note:** System update may take tens of seconds to several minutes to complete depending on the network connection status. Please wait patiently. The system will inform you when system update is completed.

**Note:** If the system is running properly, you do not need to update the firmware.

Before updating system firmware, make sure the product model and firmware version are correct. Follow the steps below to update firmware:

**Step 1:** Download the release notes of the same version as the firmware from QNAP website <http://www.qnap.com>. Read the release notes carefully to make sure you need to upgrade the firmware.

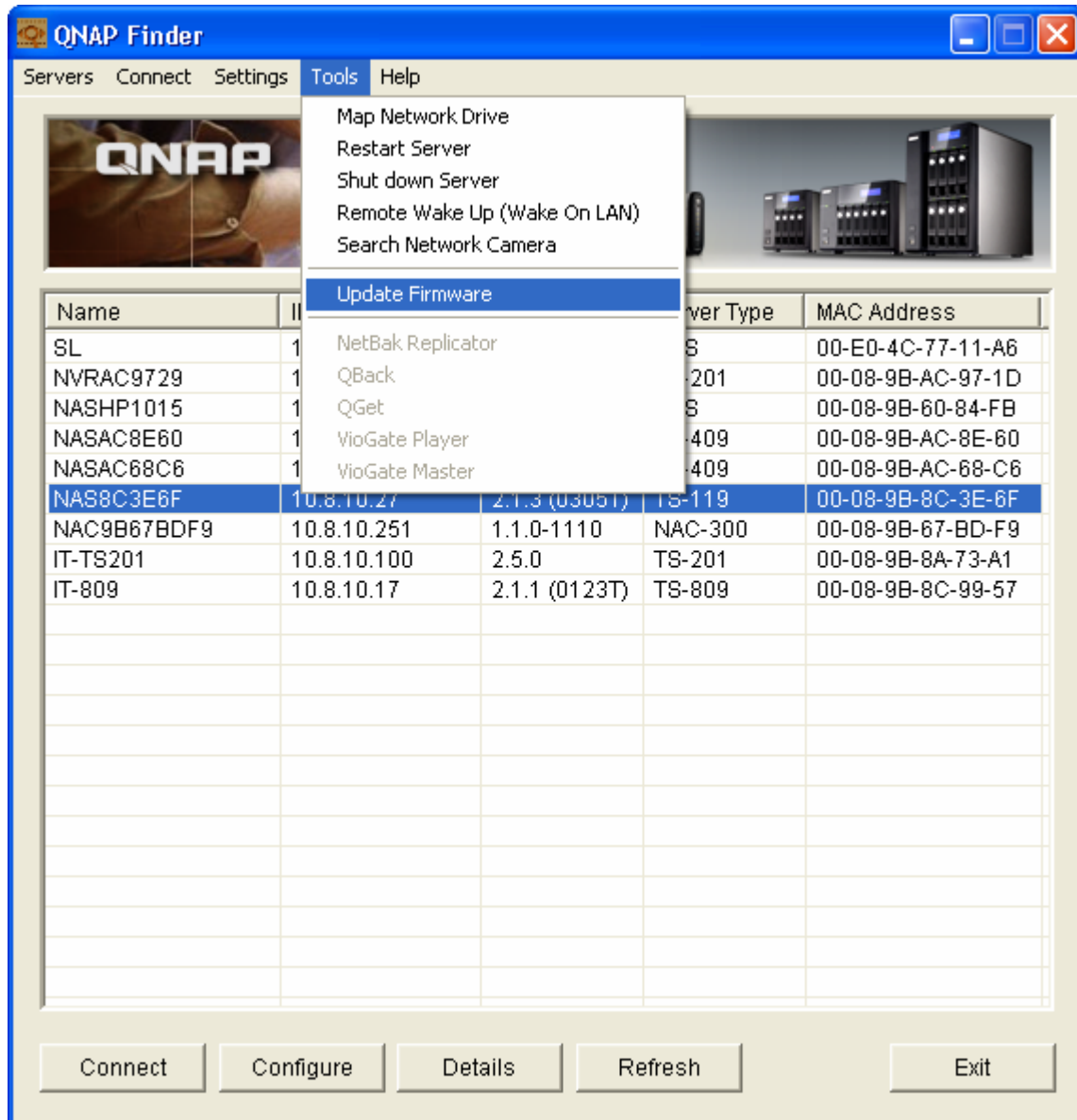
**Step 2:** Before upgrading system firmware, back up all disk data on the server to avoid any potential data loss during system update.

**Step 3:** Click **[Browse...]** to select the correct firmware image for system update. Click **[Update System]** to update the firmware.

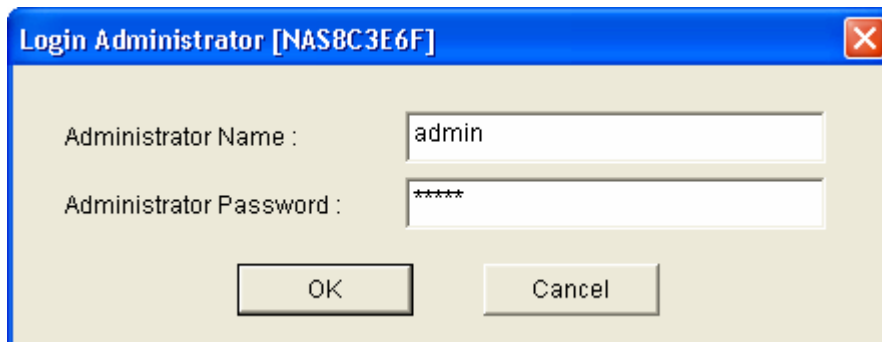
System update may take tens of seconds to several minutes to complete depending on the network connection status. Please wait patiently. The system will inform you when system update is completed.

## Update the system firmware by Finder

You can update the system firmware by QNAP Finder. Select a NAS model and click "Update Firmware" from the Tools menu.

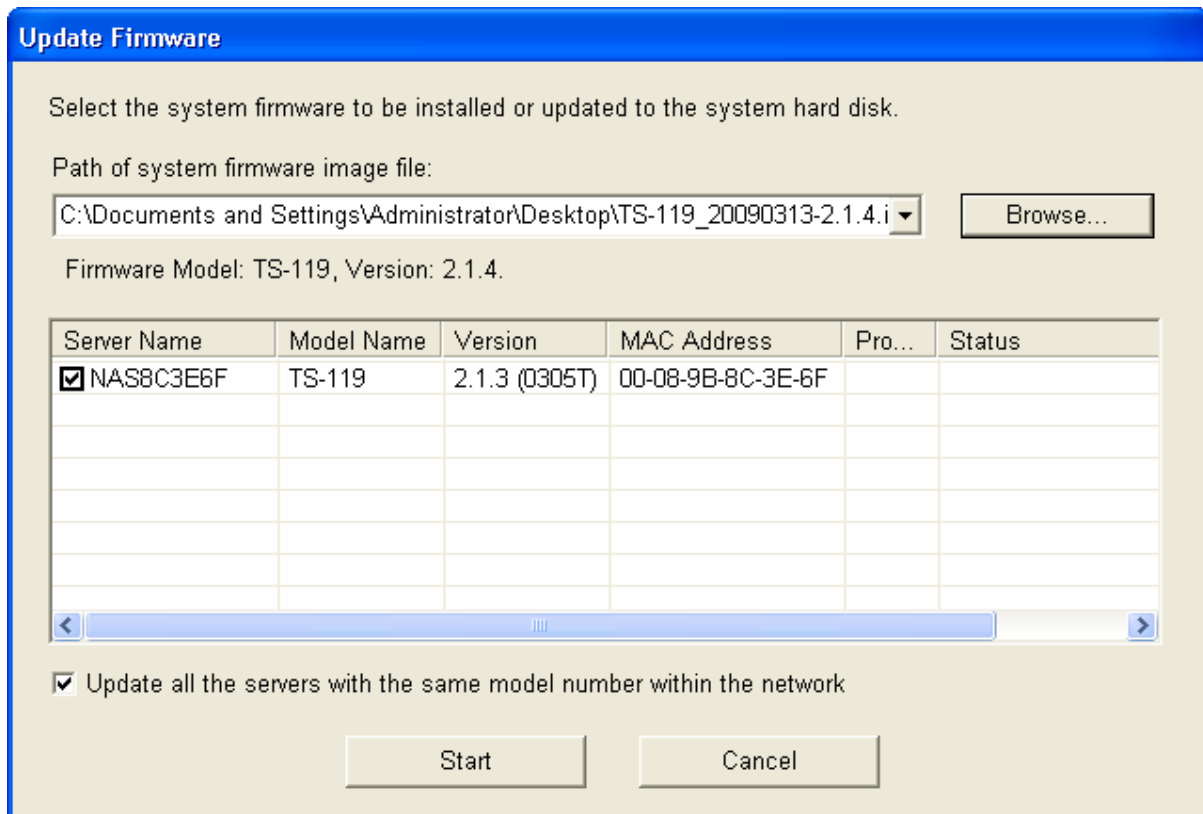


Login as the administrator.



A dialog box titled "Login Administrator [NAS8C3E6F]" with a close button in the top right corner. It contains two input fields: "Administrator Name" with the text "admin" and "Administrator Password" with masked characters "\*\*\*\*\*". Below the fields are "OK" and "Cancel" buttons.

Browse and select the firmware for the NAS. Click "Start" to update the system.



A dialog box titled "Update Firmware" with a close button in the top right corner. It contains the following elements:

- Text: "Select the system firmware to be installed or updated to the system hard disk."
- Text: "Path of system firmware image file:"
- Text box: "C:\Documents and Settings\Administrator\Desktop\TS-119\_20090313-2.1.4.i" with a dropdown arrow.
- Button: "Browse..."
- Text: "Firmware Model: TS-119, Version: 2.1.4."
- Table with 6 columns: Server Name, Model Name, Version, MAC Address, Pro..., and Status.
- Table content:

Server Name	Model Name	Version	MAC Address	Pro...	Status
<input checked="" type="checkbox"/> NAS8C3E6F	TS-119	2.1.3 (0305T)	00-08-9B-8C-3E-6F		

Below the table is a scrollbar. At the bottom, there is a checkbox labeled "Update all the servers with the same model number within the network" which is checked. Below the checkbox are "Start" and "Cancel" buttons.

**Note:** You can use the Finder to update all the servers of the same model on the same local network. Make sure you have administrator access to all the servers you want to update.



### 3.7.7 USB One Touch Copy Backup

You can configure the function of the USB one touch copy button in this page. The following three functions are available:

- Copy from the front USB storage to a directory of the internal drive of the NAS.
- Copy to the front USB storage from a directory of the internal drive of the NAS.
- Disable the one touch copy button.

- USB one touch copy backup

To configure the function of the USB one touch copy button.

☒ Copy from the front USB storage device to the  directory of the internal disk.  
Backup method:  Back up data to the newly created directory on the destination sharing folder

☐ Copy to the front USB storage device from the  directory of the internal disk.

☐ Disable one touch copy button

Note: The USB LED blinks when data backup to an external device is in process. The USB one touch copy button will be disabled temporarily. If you press the button during the data transfer process, the server will beep thrice to alert you the button is disabled. Please wait for the backup to finish and the USB LED to stop flashing, and then use the USB one touch copy button again.

Apply

### 3.7.8 Change Logo

You can choose your own picture to display on the login page of the NAS. The size of the picture cannot exceed 20K bytes.

Change Logo

Please select an image from the **To be displayed** pull-down menu. Then click **[Apply]** to confirm the change.

To upload your own image, click **[Browse...]** to select the image. Then click **[Upload]** to upload the image.

To replace an image, select an appropriate image from the **To be replaced to** pull-down menu and click **[Apply]**.

Uploaded image:

Browse...

Upload

To be replaced to:

Not replace

Replace

To be displayed:

Image 1

Image 1

Image 2

Uploaded Image

Image 3

Image 4

Current Logo Image

Note: For the best image effect, the recommended size for the image is 100 x 100 pixels.

Apply

### 3.7.9 Back up to an External Storage Device

– Back up to an external storage device

Back up the local disk data to an external storage device. You can select instant, automatic, or schedule backup.

The network drives for backup

The network drives not for backup

Network Recycle Bin 1  
Public  
Qdownload  
Qmultimedia  
Qrecordings  
Qusb  
Qweb  
media

Create

Delete

Back up to an external storage device : USBDisk1 The drive is ready.  
Free Size/Total Size: 234527 MB / 238475 MB

Backup method : Backup Now Execute backup immediately.

Copy options : Copy Back up data to the destination drive.

Current backup status : No backup operations.

Last backup time : 1969/12/31 19:00:00 ~ 1969/12/31 19:00:00

Last backup result : —

OK

You can back up the local drive data to an external storage device. In this page, you can select to execute instant, automatic, or schedule backup methods, and configure the relevant settings.

- Backup Now: To back up data to the external storage device immediately.
- Schedule Backup: To back up data by schedule. You can select the week day and time to execute the backup.
- Auto-backup: To execute the backup automatically once the storage device is connected to the NAS.

#### Copy Options:

You can select "Copy" or "Synchronize" for the copy options. When "Copy" is selected, files are copied from the NAS to the external device. By selecting "Synchronize", the data on the internal drives of the NAS and the external storage device are synchronized. Any different files on the external device are deleted.

**Note:** In the copying and synchronizing process, if the identical files exist on both sides, the files are not copied. If there are files in the same name but different in size or modified dates on NAS and the external device, the files on the external device are overwritten.

### 3.7.10 Remote Replication (Disaster Recovery)

You can use this option to back up the files on the NAS to another QNAP NAS or Rsync server over LAN or the Internet.

**Make sure a network share is created before creating a remote replication task.**

#### Using Remote Replication

Login the NAS and go to "Remote Replication" in "System Tools".

- ✓ **Port Number:** Specify a port number for remote replication. The default port number is 873.

**Note:** If this server connects to the Internet via a router, make sure the specified port for remote replication is opened on the router.

- ✓ **Enable backup from a remote server to the local host:** Check this option to allow the remote server to back up data to the local host via remote replication.
- ✓ **Allow remote Rsync server to back up data to NAS:** Enable this option to allow a remote Rsync server to back up data to the NAS by remote replication.

Remote Replication

By using this function, you can back up the data on the local server to a remote server of the same NAS series, and also allow backup from remote server to the local server.

Port Number:

☒ Enable backup from a remote server to the local host.

☐ Allow remote Rsync server to back up data to NAS

OK

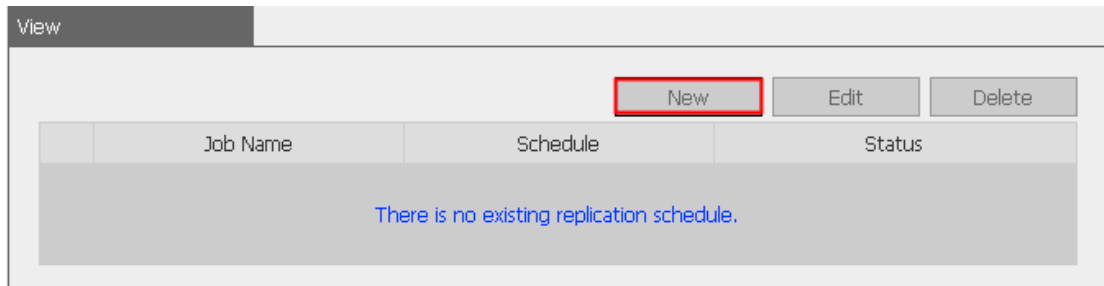
View

NewEditDelete

Job Name	Schedule	Status
There is no existing replication schedule.		

Follow the steps below to create a remote replication job for backup from the NAS to another QNAP NAS.

- a. Click "New" to create a new task.

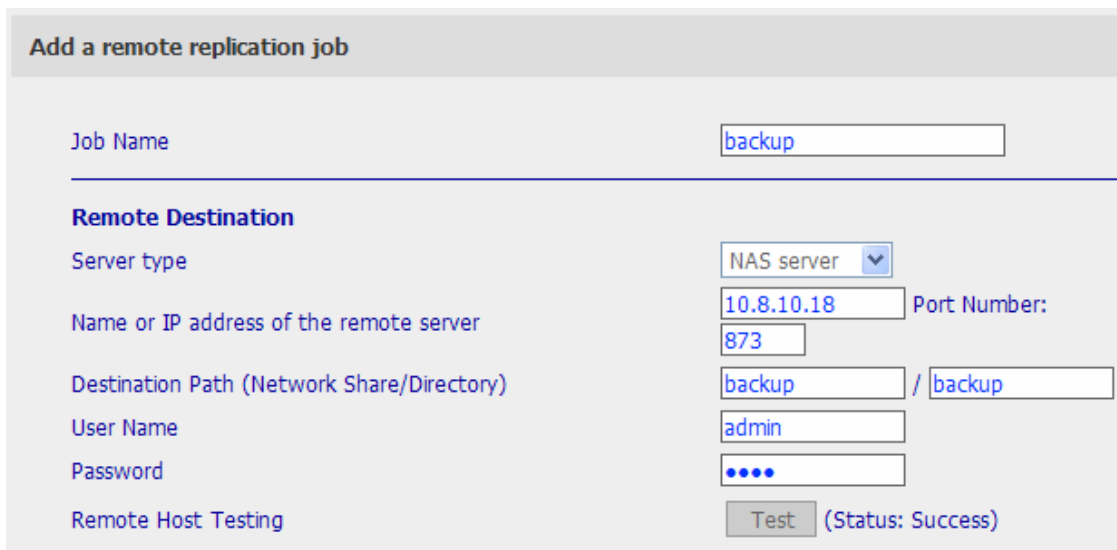


View

New Edit Delete

Job Name	Schedule	Status
There is no existing replication schedule.		

- b. Enter the job name and the remote destination settings. Select the server type. Enter the IP address or domain name (if any) of the remote server, the port number of the remote server for remote backup, the destination path, and the user name and password with write access to the remote server. Click "Test" to check if the connection is successful or not.



**Add a remote replication job**

Job Name

---

**Remote Destination**

Server type

Name or IP address of the remote server  Port Number:

Destination Path (Network Share/Directory)  /

User Name

Password

Remote Host Testing  (Status: Success)

**Note:** To use remote replication, enable Microsoft Networking service, make sure the destination network share and directory have been created, and the user name and password are valid to login the destination folder.

- c. Enter the source path. You can select to back up the whole network share and a folder in the share. Then select to replicate data now or set a replication schedule.

**Local Source**

Source Path (Network Share/Directory) Public /

---

☒ Replicate Now

Replication Schedule 00 Hour : 00 Minute

☐ Daily Monday

☐ Weekly 01 Day

☐ Monthly

- d. Set up other options for the remote replication job. Then click "OK".

☐ Enable encryption, port number:

(Note that you have to allow SSH encryption on the remote host server and the port number must be the same as the SSH port of the remote host.)

☐ Activate file compression

☐ Stop network file services while replicating

☐ Perform incremental replication

☐ Delete extra files on remote destination

OK Cancel

You can view the backup status, or edit or delete the replication job.

View			New	Edit	Delete
	Job Name	Schedule	Status		
<input type="checkbox"/>	backup	10:51 - Replicate Now	Finished(10:51 2008/10/23)		

### 3.7.11 Backup/ Restore/ Reset Settings

- To backup all settings, including user accounts, server name and network configuration etc., click "Backup" and select to open or save the setting file.
- To restore all settings, click "Browse" to select a previously saved setting file and click "Restore" to confirm.
- To reset all settings to default, click "Reset".

**Caution:** When you press "Reset" on this page, all drive data, user accounts, network shares and system settings are cleared and restored to default. Please make sure you have backed up all the important data and system settings before resetting the NAS.

– Backup/ Restore/ Reset Settings

- To restore all settings, click Browse to select a previously saved setting file and click Restore to confirm.
- To backup all settings, including user accounts, server name and network configuration etc., click Backup and select to open or save the setting file.
- To reset all settings to default, click Reset.

**Caution:** When you press [Reset] on this page, all drive data, user accounts, network shares and system settings are cleared and restored to default. Please make sure you have backed up all the important data and system settings before resetting the NAS.



### 3.7.12 IP Filter

Enter the IP address or network from which the connections to this server are allowed or rejected. When the connection of a host server is denied, all protocols of that server are not allowed to access the local server.

After changing the settings, click "Apply" to save the changes. The network services will be restarted and current connections to the server will be disconnected.

IP Filter

Security Level

Network Access Protection

Enter the IP address or network from which the connections to this server will be allowed or rejected.

☐ High ◦ Allow connections from the list only

☒ Medium ◦ Deny connections from the list

☐ Low ◦ Allow all connections

+

-

Genre	IP address or network domain	Time left for IP blocking
Single IP address	172.17.23.99	Block forever

●

Apply

The network access protection enhances the security of the system and prevents unwanted intrusion. You can select to block the IP for a certain period of time or forever if the IP fails to login the server from a particular connection method.

— IP Filter

Security Level   **Network Access Protection**

☒ Enable network access connection

☒ SSH: In 10 minutes , after unsuccessful attempts for 10 time(s) , block the IP for 5 minutes .

☒ Telnet: In 10 minutes , after unsuccessful attempts for 10 time(s) , block the IP for 5 minutes .

☐ HTTP(S): In 10 minutes , after unsuccessful attempts for 10 time(s) , block the IP for 5 minutes .

☐ FTP: In 10 minutes , after unsuccessful attempts for 10 time(s) , block the IP for 5 minutes .

☐ SAMBA: In 10 minutes , after unsuccessful attempts for 10 time(s) , block the IP for 5 minutes .

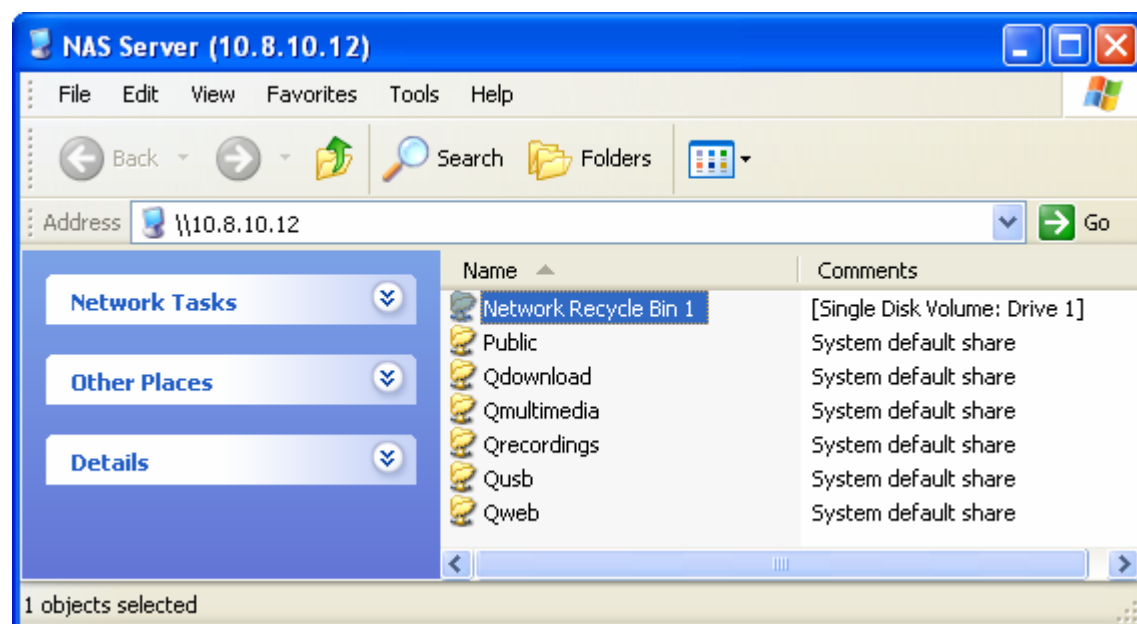
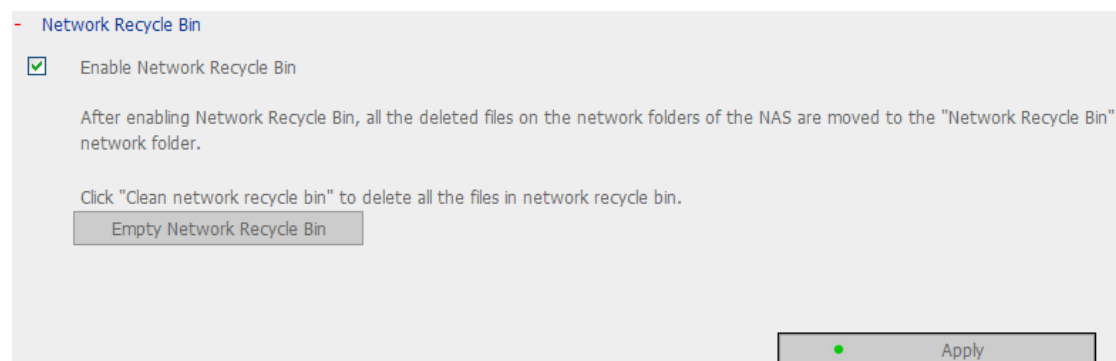
☐ AFP: In 10 minutes , after unsuccessful attempts for 10 time(s) , block the IP for 5 minutes .

● Apply

### 3.7.13 Network Recycle Bin

This function enables files deleted on the shares of the NAS to be removed to Network Recycle Bin to reserve the files temporarily. To enable this function, check the box "Enable Network Recycle Bin" and click "Apply". The system will create a network share "Network Recycle Bin" automatically.

To delete all the files in network recycle bin, click "Clean Network Recycle Bin".



### 3.7.14 Remote Login

After enabling this option, you can access this server via Telnet or SSH encrypted connection (only the account "admin" can login remotely). You can use certain Telnet or SSH connection clients for connection, e.g., putty. Please make sure you have opened the configured ports on your router or firewall when using this function.

- Remote Login

After enabling this option, you can access this server via Telnet or SSH connection. (Only the account admin can login remotely.)

☒ Allow Telnet connection

Port13131

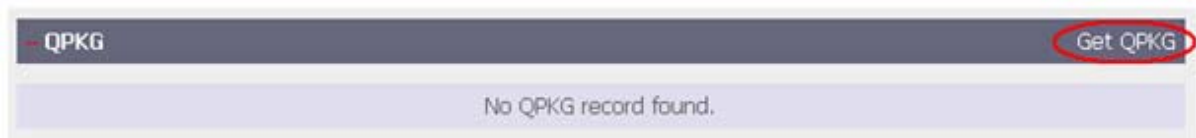
☒ Allow SSH connection

Port22

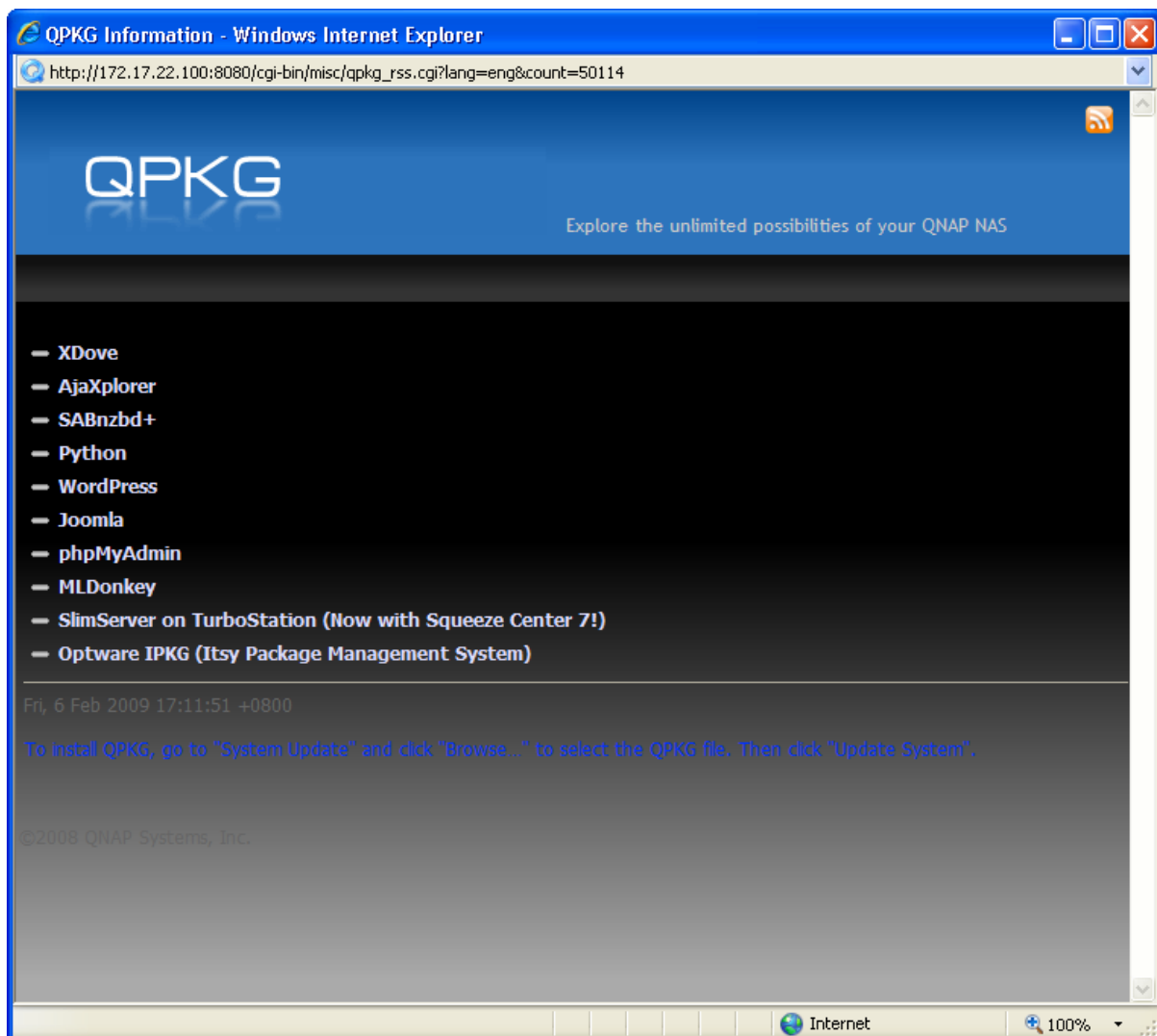
Apply

### 3.7.15 QPKG

You can install QPKG packages to add more functions to NAS. Click "Get QPKG".



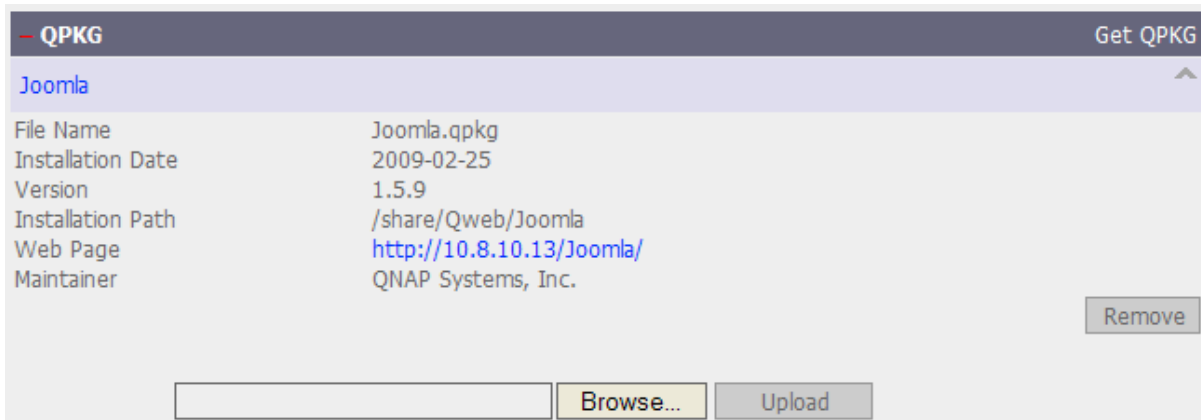
Before you install the packages, make sure the files are correct, read the instructions carefully, and back up all important data on the NAS. Download the software package you want to install on NAS to your computer.



Before installing the QPKG package, please unzip the downloaded file. To install QPKG, browse to select the correct qpkg file and click "Upload".



After uploading the QPKG packages, the details are shown on the QPKG page. Click the link to access the web page of the installed software package and start to configure the settings. To remove the package from the NAS, click "Remove".



### 3.7.16 Import SSL Secure Certificate

The Secure Socket Layer (SSL) is a protocol for encrypted communication between web servers and browsers for secure data transfer. You can upload a secure certificate issued by a trusted provider. After you have uploaded a secure certificate, you can access the administration interface by SSL connection and there will not be any alert or error message. The system supports X.509 certificate and private key only.

- Import SSL Secure Certificate

You can upload a secure certificate issued by a trusted provider. After you have uploaded a secure certificate successfully, you can access the administration interface by SSL connection and there will not be any alert or error message.

If you upload an incorrect secure certificate, you may not be able to login the server via SSL. To resolve the problem, you can restore the secure certificate to default and access the system again.

Status: Default secure certificate being used

Certificate: Please enter a certificate in X.509PEM format below.

View sample

Private Key: Please enter a certificate in X.509PEM format below.

View sample

Upload

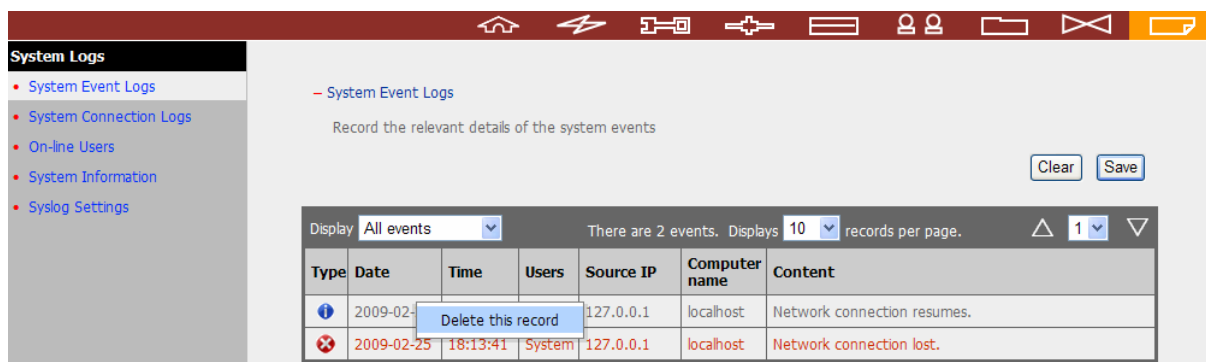
Clear

## 3.8 Event Logs



### 3.8.1 System Event Logs

The NAS can store 10,000 recent event logs, including warning, error, and information messages. In case of system malfunction, event logs can be retrieved to analyze system problems.

**Tip:** You can right click a log and delete the record.



The screenshot shows the 'System Event Logs' interface. On the left is a sidebar with a 'System Logs' header and a list of links: 'System Event Logs', 'System Connection Logs', 'On-line Users', 'System Information', and 'Syslog Settings'. The main area has a title 'System Event Logs' and a subtitle 'Record the relevant details of the system events'. There are 'Clear' and 'Save' buttons. Below this is a table with columns: Type, Date, Time, Users, Source IP, Computer name, and Content. The table shows two events. The first event is a blue information icon, dated 2009-02-25, at 18:13:41, from the 'System' user, with Source IP 127.0.0.1, Computer name localhost, and Content 'Network connection resumes.'. The second event is a red error icon, dated 2009-02-25, at 18:13:41, from the 'System' user, with Source IP 127.0.0.1, Computer name localhost, and Content 'Network connection lost.'. A blue button labeled 'Delete this record' is positioned over the first event's row. Above the table, there is a 'Display' dropdown set to 'All events', a status bar indicating 'There are 2 events. Displays 10 records per page.', and a page number '1' with up and down arrows.

Type	Date	Time	Users	Source IP	Computer name	Content
	2009-02-25	18:13:41	System	127.0.0.1	localhost	Network connection resumes.
	2009-02-25	18:13:41	System	127.0.0.1	localhost	Network connection lost.



### 3.8.2 System Connection Logs

The system supports logging HTTP, FTP, Telnet, SSH, AFP, NFS, SAMBA, and iSCSI connections. Click "Options" to select the connection type to be logged.

The file transfer performance can be slightly affected by enabling the event logging.

**Tip:** You can right click the log on the list of connection logs and select to delete the record or add the IP to banned list and select how long the IP should be banned.

- System Connection Logs

Record the logs of connections to the system

Status: Logging

Options

Stop logging

Clear

Save

Display All events ▼

There are 110 events. Displays 10 ▼ records per page.

△ 1 ▼

Typ	Date	Time	Users	Source IP	Computer name	Connection type	Accessed resources	Action
⚠	2009-02-13	11:55:05	Administ	172.22.97	qnap-zj18qp	SAMBA	---	Login Fail
⚠	2009-02-13	11:55:05	Administ	172.22.97	qnap-zj18qp	SAMBA	---	Login Fail
⚠	2009-02-13	11:55:05	Administ	172.22.97	qnap-zj18qp	SAMBA	---	Login Fail
ℹ	2009-02-13	11:54:44	admin	10.8	ch31	HTTP	Administration	Login OK
ℹ	2009-02-13	11:54:40	admin	10.8		HTTP	---	Logout
ℹ	2009-02-13	11:46:33	admin	172.22.97		TELNET	---	Logout

Archive logs: Enable this option to archive the connection logs. The system generates a csv file automatically and saves it to a specified folder when the number of logs reaches the upper limit.

- Connection Type

Select the connection type to be logged.

☒

 HTTP

☒

 FTP

☒

 Telnet

☒

 SSH

☐

 AFP

☐

 NFS

☐

 SAMBA

☐

 iSCSI

- Archive logs

☐

 When the number of logs reaches 10,000, archive the connection logs and save the file in the folder: 

Qdownload

Apply

Close

### 3.8.3 On-line Users

The information of the on-line users accessing the system via networking services is shown in this page.

**Tip:** You can right click a log and select to disconnect the IP connection and/or add the IP to the block list.

- On-line Users

Display the information of the on-line users accessing the system via networking services

There are 2 events.

Login date	Login time	Users	Source IP	Computer name	Connection type	Accessed resources
2009-02-13	12:27:48	admin	10.8.10.25	---	HTTP	Administration
2009-02-13	12:27:48	admin	10.8.10.25	---	NFS	---

Disconnect this connection

Add to the block list ▶

Disconnect this connection and block the IP ▶

### 3.8.4 System Information

You can view the system information, e.g., CPU usage and memory on this page.

- System Information

CPU Usage	2.7 %	System temperature	46° C/114°F	<div></div>
Total Memory	503.6MB	HDD 1 temperature	45° C/113°F	<div></div>
Free Memory	464.4MB			
Packets Received	169737			
Packets Sent	25214			
Error Packets	0			
System Up Time	0 Day(s) 16 <sup>Hour</sup> (s) 12 <sup>Minute</sup> (s)			

### 3.8.5 Syslog Settings

Syslog is a standard for forwarding log messages in an IP network. You can enable this option to save the event logs and connection logs to a remote syslog server.

– Syslog Settings

☒ Enable syslog

You can enable this option to save the event logs and connection logs to a remote syslog server.

Syslog Server IP:

UDP Port:

Select the logs to record

☒ System Event Logs

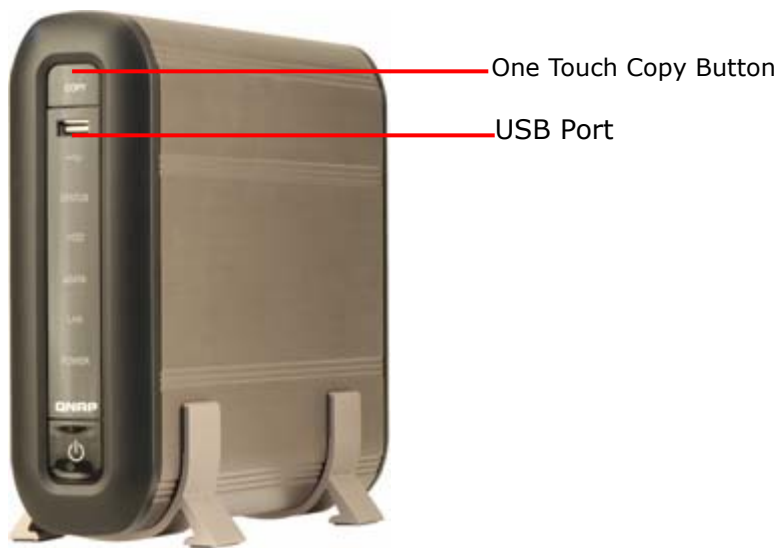
☐ System Connection Logs (You must enable system connection logs to use this option.)

Apply

## Chapter 4 Data Copy by the Front USB Port

The NAS supports instant data copy backup from the external USB device to the NAS or the other way round by the front USB Copy button. To use this function, follow the steps below:

1. Make sure a hard drive is installed and formatted on the NAS. The default network share Qusb is created.
2. Turn on the NAS.
3. Configure the behavior of the Copy button on "System Tools > USB one touch copy backup" page.
4. Connect the USB device, e.g. digital camera or flash, to the front USB port of the NAS.
5. Press the Copy button. The data will be copied according to your settings on the NAS.



**Note:** Incremental backup is used for this feature. After the first time data backup, the NAS only copies the changed files since the last backup.

## Chapter 5 Multimedia Station

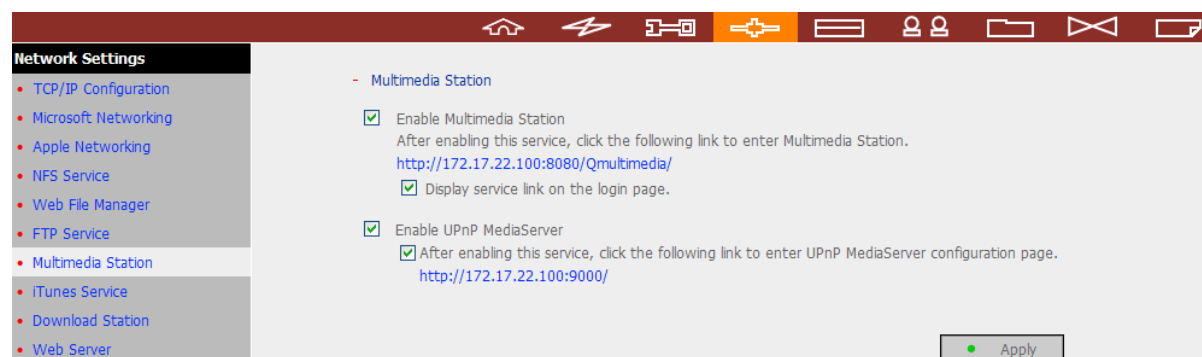
### 5.1 Share Photos and Multimedia Files via the Web

#### Interface

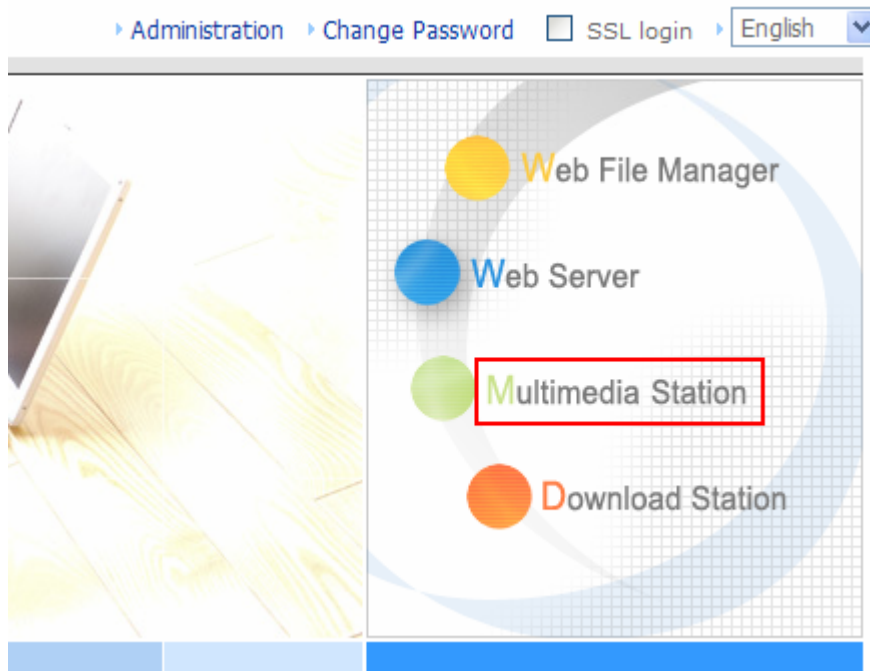
The NAS provides a user-friendly web management interface for you to manage personal albums easily. You can view images and multimedia files, or browse photos by thumbnails preview.


#### A. Upload photos by web administration

1. To use the Multimedia Station of the NAS, make sure a SATA disk is installed correctly. A share folder **Qmultimedia** will be created after the disk is initialized. Enable Multimedia function in "Network Settings".



2. Click on the link **http://NAS IP/Qmultimedia** on the Multimedia Station page or click "Multimedia Station" on the login page of NAS to access the Multimedia Station.



3. Click  on the top right hand corner. Login with administrator name and password to manage the Multimedia Station. The users without administration right can view the photos and multimedia files on the Multimedia Station but they do not have the right to modify the files. When logging in as Multimedia Station user, you can access the albums authorized for browsing.



- Click "Browse" to select the multimedia file and then click "Upload" to upload the file to the folder.



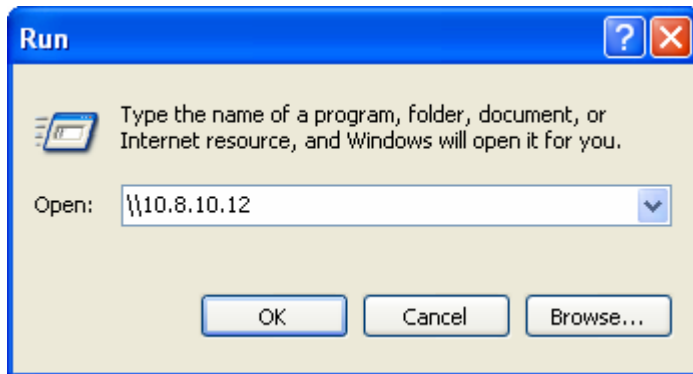
- You can also create folders by clicking  and upload the files to the folders.



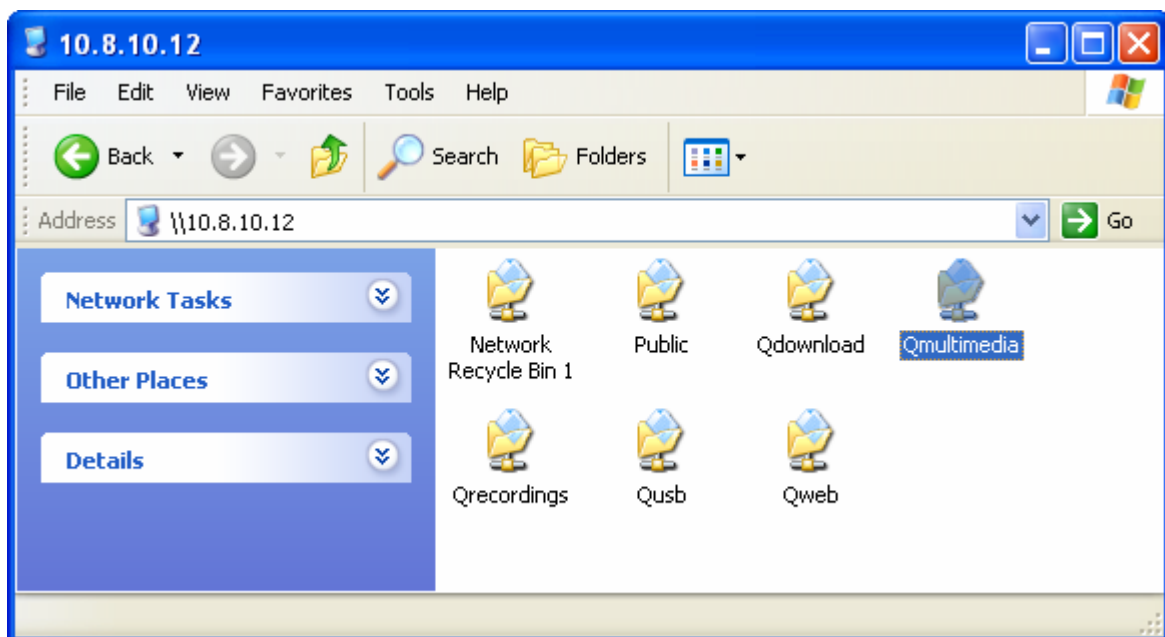
## **B. Upload photos to Qmultimedia folder directly**

You can upload multimedia files to the NAS directly by the following steps.

1. Open the Windows Run menu. Enter \\[server name] or \\[server IP] to access share folder on the NAS.



2. Open the folder Qmultimedia. Enter the user name and password to login.



3. Drag the files and folders to the folder directly. Please wait patiently when the NAS is generating thumbnails for images during uploading.

When you login Multimedia Station by web browser again, all multimedia files will be shown.



### Buttons on the Multimedia Station page

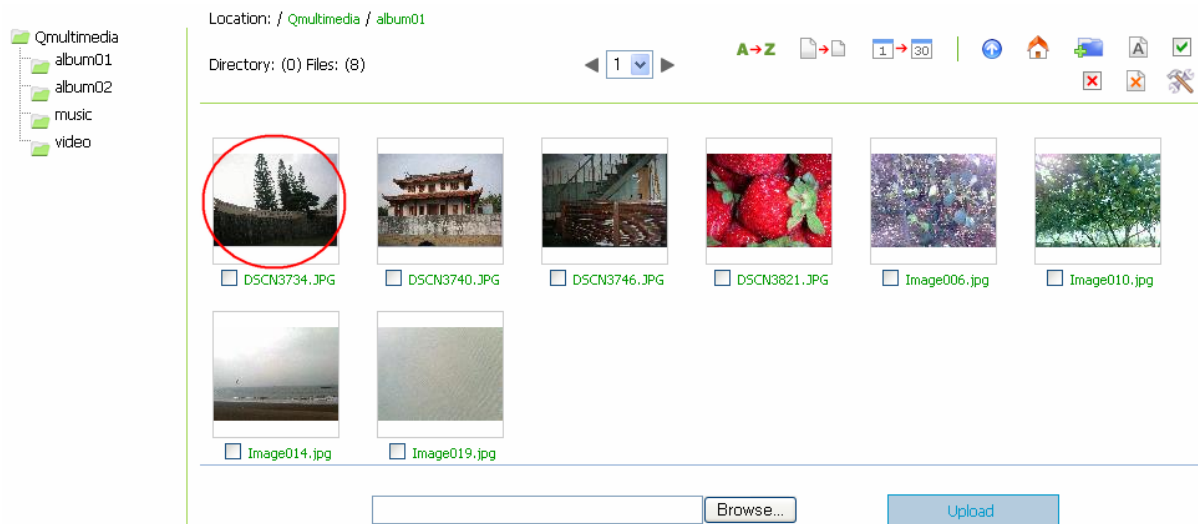
	Sort files by name
	Sort files by size
	Sort files by date
	Return to previous page
	Return to Home
	Create folder
	Rename file or folder
	Select all
	Select none
	Delete

### Support file format list

Type	File format
Picture	jpg, bmp, gif
Video	wmv, wmx, wvx, avi, mpeg, mpg, mpe, m1v, mp2, mpv2, mp2v, mpa, dvr-m, asf, asx, wpl, wm, wmx, wmd, wmz
Audio	wma, wax, cda, wav, mp3, m3u, mid, midi, rmi, aif, aifc, aiff, au, snd
Others	(Other formats not mentioned above)

## View Photo Information

1. To view detailed information of a photo, click the thumbnail of the picture.















2. The information of the photo, e.g. file name, resolution, size, camera producer will be shown on the right. You can enter a description for the picture in the box below the photo and click "Submit". To reset the description to previously saved version, click "Reset".



## Buttons Description

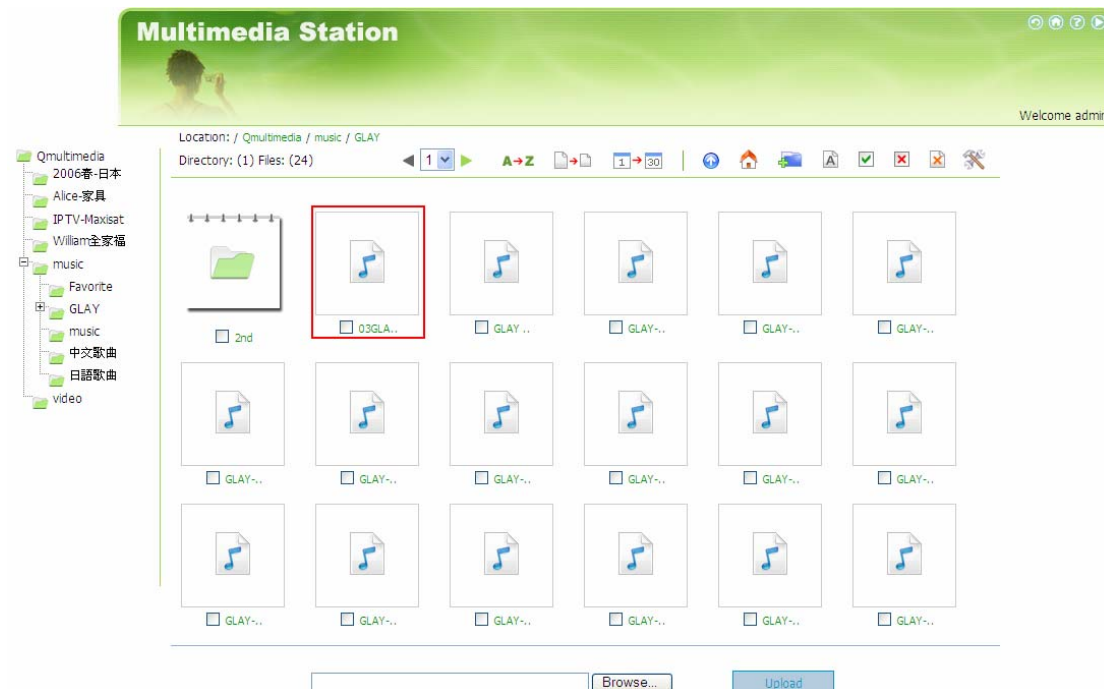
You can use the buttons on top of the photo to manage the album.

	Back to previous level
	Previous image
	Next image
	Rotate image anticlockwise
	Rotate image clockwise
	Zoom in
	Zoom out
SlideShow: <input type="text" value="3"/>  	Play slideshow. Select the time interval in seconds. Click "play" to play slide show. To stop playing, click "stop".
	Print the image
	Save the picture
	Set the picture as album cover


## Play music or video files

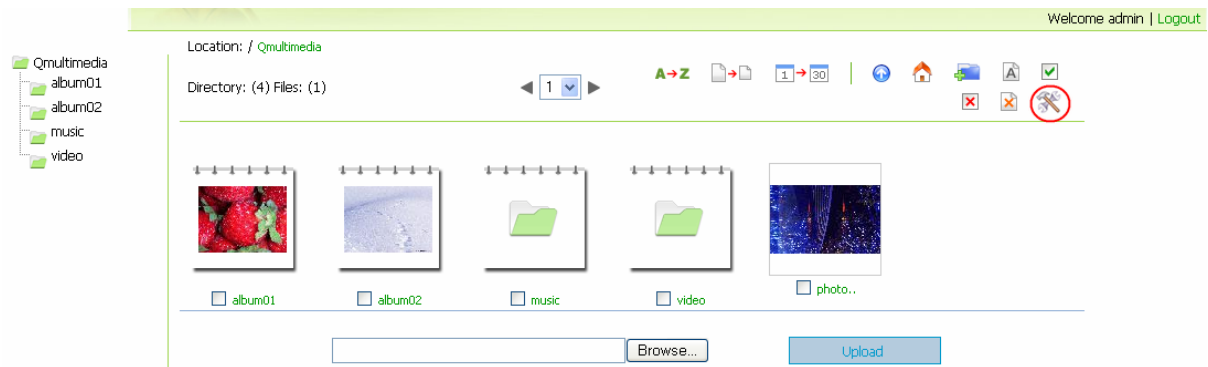
To play music or video files on the Multimedia Station, you can click the thumbnail of the file displayed on the page. The file will be played by the default music or video playing program of your PC.


\*It is recommended to use Windows Media Player 10.0 or above as the default playing program.





## C. Configure album authority

1. After logging in as administrator (admin), click  to enter the configuration page for album authority.






2. You can view, add, delete, and edit users. For any inquiries when using these functions, click the help button  on the top right corner of the page.

User list [Create user](#)  

User list

User name	Status	Maintain	Description
guest	Enable	---	System default user; you can set the authority of the guests for browsing the album.
test	Enable	Delete	
user01	Enable	Delete	general user

3. You can edit user profile and album access authority on this page. For any inquiries when using these functions, click the help button  on the top right corner of the page.

Edit personal profile  

---

User's profile

User name:

Description:

Password:

Verify Password:

☐ User cannot change the information.

☐ Disable

Accessible albums

album01  
album02

← Add

Remove →

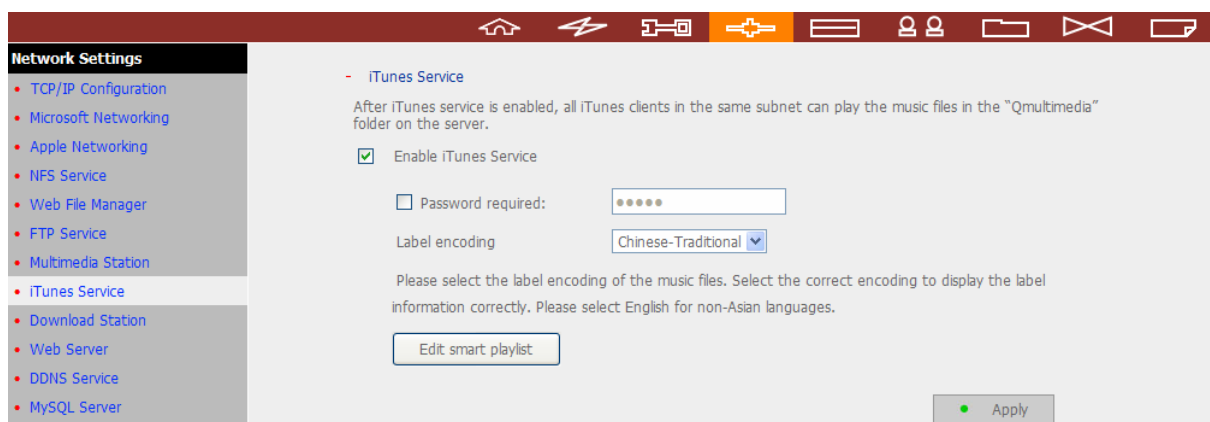
Inaccessible albums

music  
video

## 5.2 Enable iTunes Service

The mp3 files on Qmultimedia folder of the NAS can be shared to iTunes by enabling this service. All the computers with iTunes installed on LAN are able to find, browse, and play the music files on the NAS.

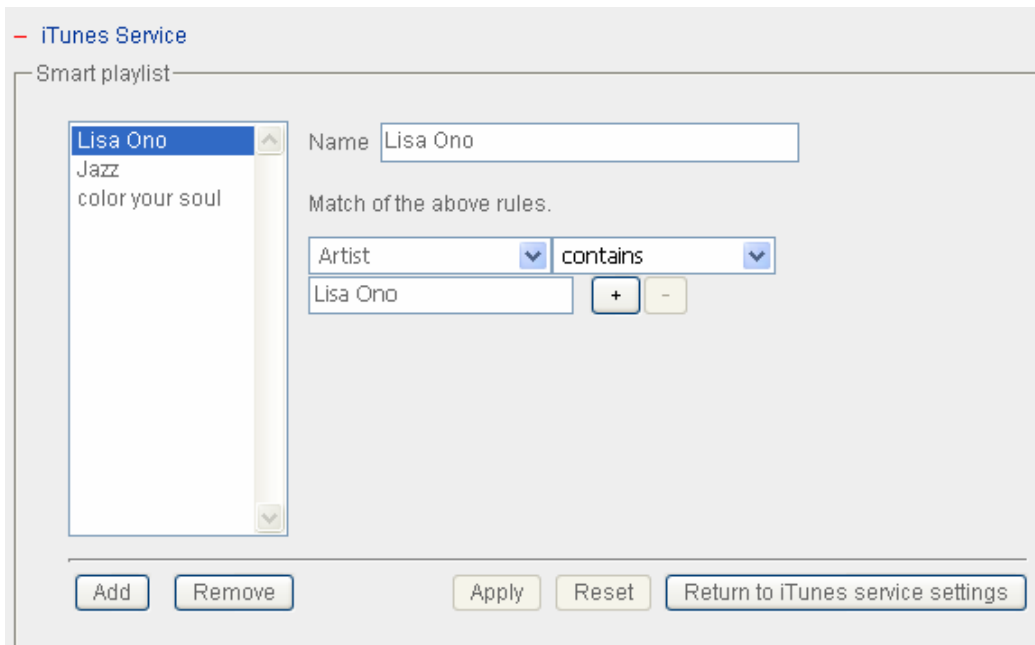
To use the iTunes service, make sure you have installed the iTunes program on your computer. Go to "Network Settings" > "iTunes Service" and enable the service. Then upload the music files to the Qmultimedia folder of NAS.



Password required: To allow the users to access the data only by entering the correct password, check this option and enter the password.



Click "Edit smart playlist" to enter the smart playlist page. You can define the playlist rules to categorize the songs into different playlists. If there is no song that matches the rules in the playlist, the iTunes client will not show the playlist. For detailed operation, please refer to the online help.



When you open iTunes, it detects the NAS automatically. All the songs on the Qmultimedia folder will be shown.



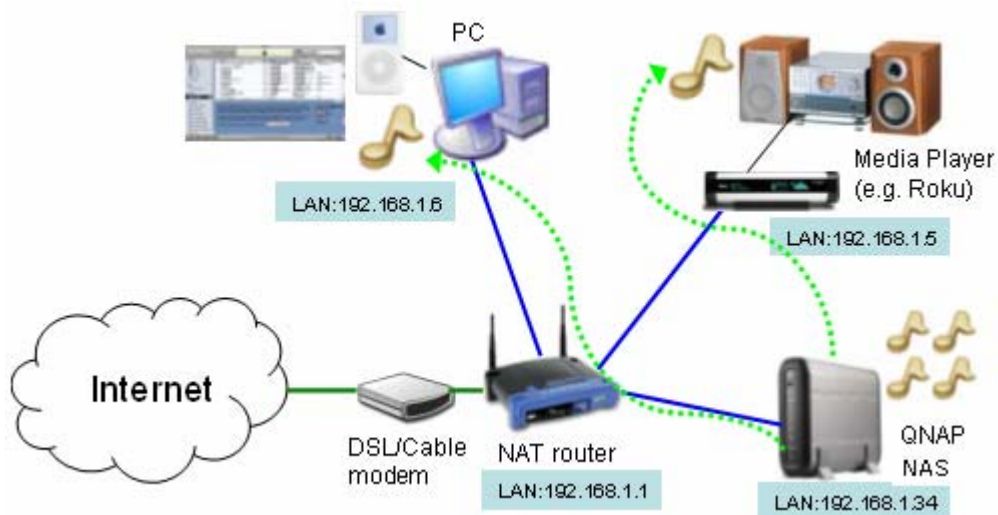
Click the triangle icon next to the NAS name. The smart playlists defined earlier will be shown. The songs are categorized accordingly. You can start to use iTunes to play the music on your NAS.



**Note:** You can download the latest iTunes software from official Apple website <http://www.apple.com>.

## 5.3 Use UPnP Media Server

The NAS is built-in with TwonkyMedia, DLNA compatible UPnP media server. Enable this function and the NAS will share particular music, photos, or video files to DLNA network. You can use DLNA compatible digital media player (DMP), to play the multimedia files on the NAS on TV or acoustic sound system.



To use UPnP Media Server, please enable this function and click the following link (<http://NAS IP:9000/>) to enter the configuration page of UPnP Media Server.

– Multimedia Station

☒ Enable Multimedia Station  
After enabling this service, click the following link to enter Multimedia Station.  
<http://10.8.12.47:8080/Qmultimedia/>  
☐ Display service link on the login page.

☒ Enable UPnP MediaServer  
☒ After enabling this service, click the following link to enter UPnP MediaServer configuration page.  
<http://10.8.12.47:9000/>

● Apply

Click the link <http://NAS IP:9000/> to enter UPnP Media Server configuration page and configure the following settings.

- (1) Language: Select the display language.
- (2) Server Name: Enter the name of NAS UPnP Media Server. This name will be shown on DMP operation interface, e.g. NAS.
- (3) Content Locations: Select the share folder on the NAS to be shared to DMP. The default folder is Qmultimedia. You can add more than one share folder.

Click "Save Changes" to save the settings.

**MediaServer**  
Version 4.4.11  
TwonkyMedia Configuration: Sharing

Basic Setup  
First steps  
Sharing  
Clients/Security  
Internet Radio

Advanced Setup  
External applications  
Naming  
Music tree  
Photo tree  
Video tree  
Miscellaneous

Support  
Maintenance  
FAQ

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(2003,2008).  
All rights reserved

Save Changes Cancel Rescan content directories

Content Locations:

<input checked="" type="checkbox"/>	/Qmultimedia	All content types	Browse
<input checked="" type="checkbox"/>		All content types	Browse

Add new content directory

Directories where the server shall scan for content. Each directory can be limited to a certain content type. The default setting will scan for all content types. Sharing can be temporarily disabled by unchecking the directory.

Rescan in minutes: 120

This option specifies the rescan behavior of the server. If set to 0, automatic rescans are disabled. A positive value specifies the period between rescans of content directories in minutes. -1 enables the server to watch content directories automatically for new content without the need for rescans.

After configuring the settings, you can upload mp3, photos, or video files to Qmultimedia folder or other specified folders on the NAS.

**Note:** If you upload multimedia files to the default share folder but the files are not shown on Media Player, you can click "Rescan content directories" or "Restart server" on the Media Server configuration page.

The built-in UPnP Media Server of the NAS is compatible with the DLNA DMP devices in the market.

### **About UPnP and DLNA**

Universal Plug and Play (UPnP) is a set of computer network protocols promulgated by the UPnP Forum. The purpose of UPnP is to allow devices to connect seamlessly and to simplify the implementation of networks at home and in corporate environment. UPnP achieves this by defining and publishing UPnP device control protocols built upon open, Internet-based communication standards.

The term UPnP is gleaned from Plug-and-play, a technology for dynamically attaching devices to a computer directly.

The Digital Living Network Alliance (DLNA) is an alliance of a number of consumer electronics, mobile and personal computer manufacturers. Its aim is to establish a home network in which the electronic devices from all companies are compatible with each other under an open standard. The alliance also tries to promote the idea of digital home by establishing DLNA certification standard. All DLNA certified products connected to the home network can be accessed seamlessly to enable consumers to enjoy digital life conveniently.

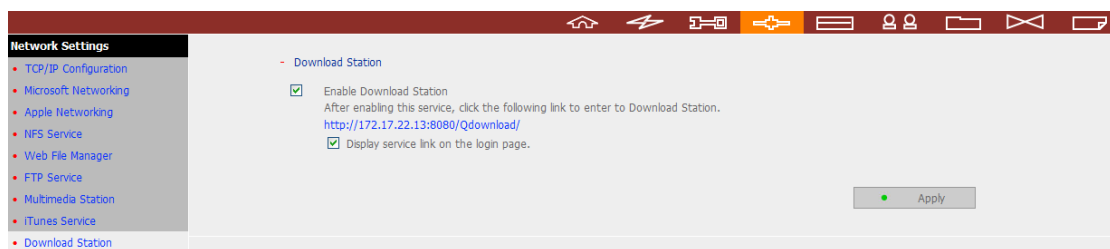
## Chapter 6 Download Station

The NAS supports BT, HTTP, and FTP download. You can add download task to the NAS and let the server finish downloading independent of PC.

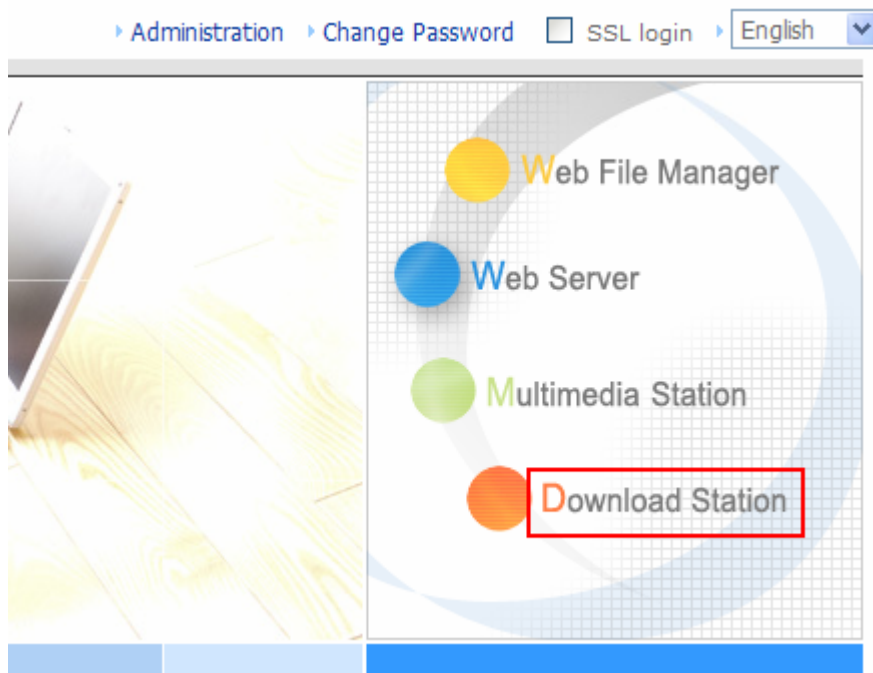


**Warning:** Please be warned against illegal downloading of copyrighted materials. The Download Station functionality is provided for downloading authorized files only. Downloading or distribution of unauthorized materials may result in severe civil and criminal penalty. Users are subject to the restrictions of the copyright laws and should accept all the consequences.

1. To use Download Station, make sure a SATA disk is installed correctly in the NAS. A share folder **Qdownload** will be created. Enable this function in "Network Settings".



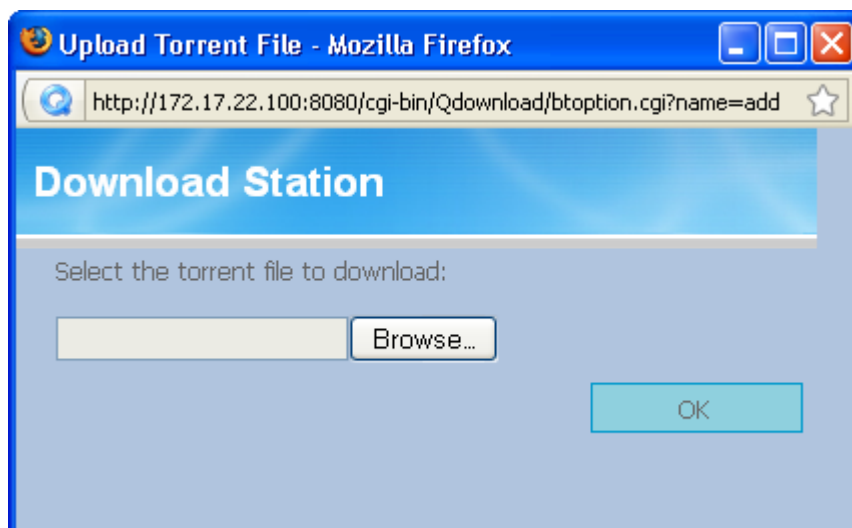
2. Click on the link **http://NAS IP/Qdownload** on the Download Station page or click **Download Station** on the login page of the NAS to access the Download Station.



3. Select **Add new BT task** or **Add new FTP/HTTP task**.

#### (A) Add new BT task

Click "Add new BT task" on the left and upload a torrent file. You can download legal torrent files by searching on the Internet. There are websites that provide legally sharing torrents e.g. [www.legaltorrents.com](http://www.legaltorrents.com). Please download the torrent files to your local disk and then upload them to the NAS.

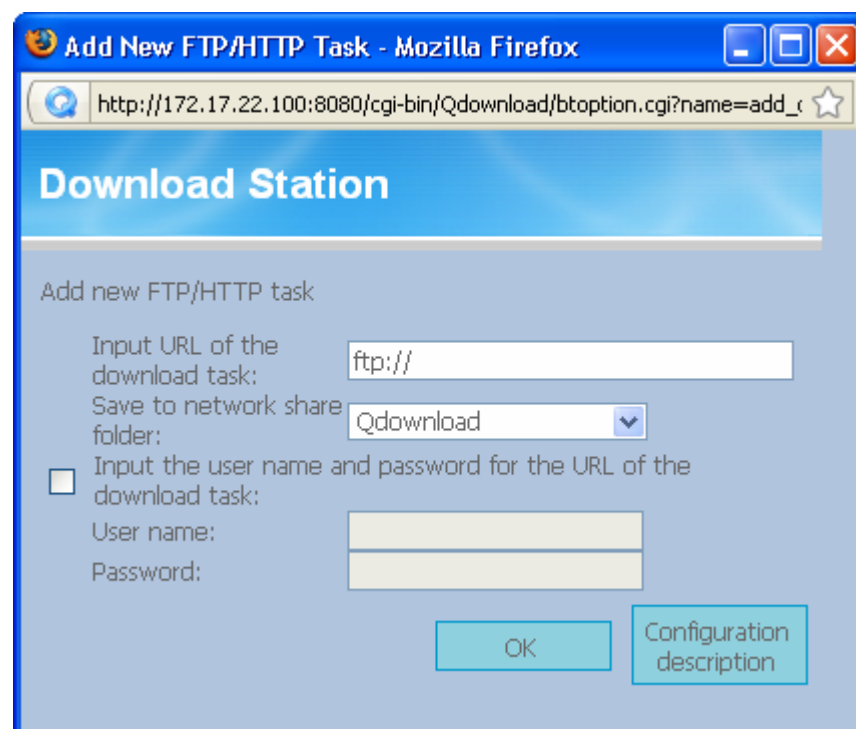




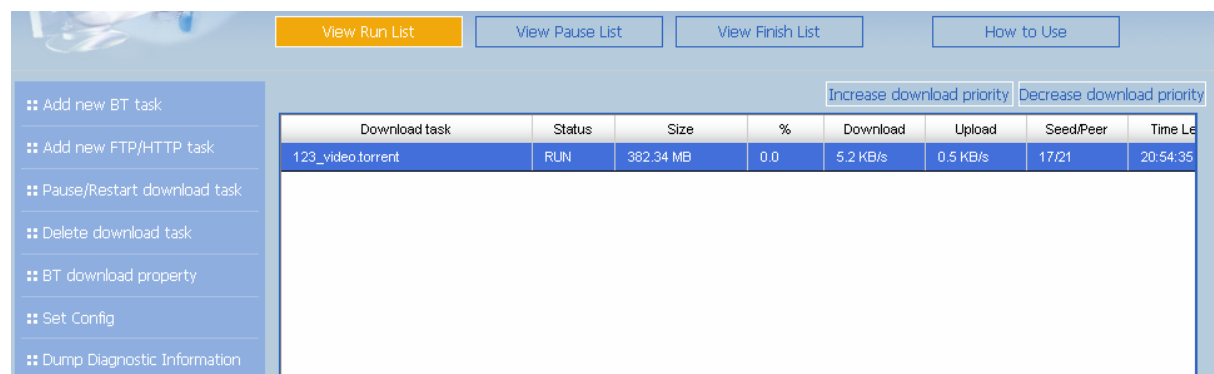
### (B) Add new FTP/HTTP task

To run an FTP download task, click "Add new FTP/HTTP task". Enter the FTP URL of the download task and select the share folder to save the files. Enter the user name and password to login the FTP server (if necessary). Then click "OK" to start downloading.

To run an HTTP download task, click "Add new FTP/HTTP task". Enter the HTTP URL of the download task and select the share folder to save the files. Then click "OK" to start downloading.

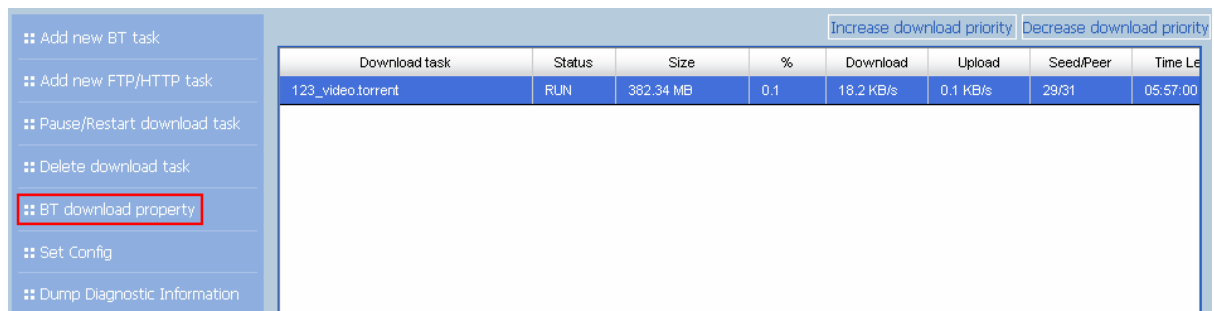


4. After uploading a download task, the task will appear on **View Run List**.



Download task	Status	Size	%	Download	Upload	Seed/Peer	Time Le
123_video.torrent	RUN	382.34 MB	0.0	5.2 KB/s	0.5 KB/s	17/21	20:54:35

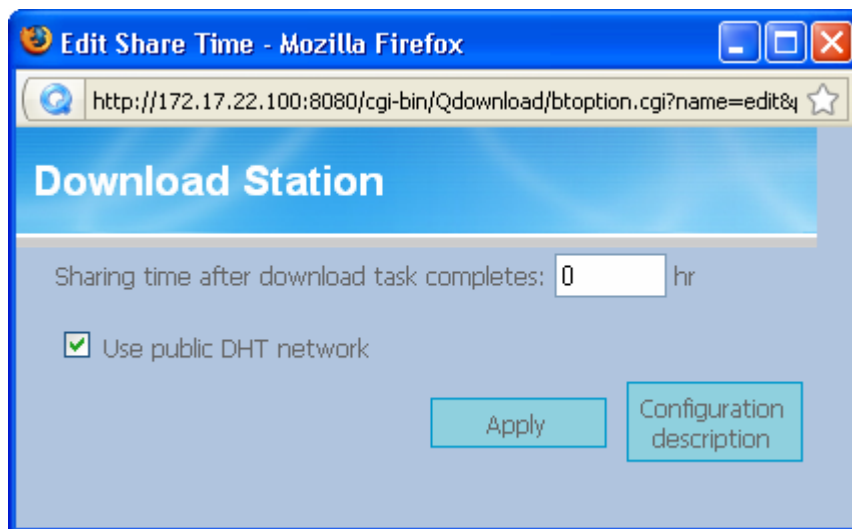
5. You can select a download task and click "BT download property" to enable or disable DHT public network and configure the sharing time after download completes.



The screenshot shows the Download Station interface. On the left is a sidebar with the following buttons: "Add new BT task", "Add new FTP/HTTP task", "Pause/Restart download task", "Delete download task", "BT download property" (highlighted with a red box), "Set Config", and "Dump Diagnostic Information". On the right is a table of download tasks.

Download task	Status	Size	%	Download	Upload	Seed/Peer	Time Left
123_video.torrent	RUN	382.34 MB	0.1	18.2 KB/s	0.1 KB/s	29/31	05:57:00

Buttons at the top right of the table: "Increase download priority" and "Decrease download priority".



The screenshot shows a Mozilla Firefox window titled "Edit Share Time - Mozilla Firefox". The address bar shows the URL: <http://172.17.22.100:8080/cgi-bin/Qdownload/btoption.cgi?name=edit&>. The main content area is titled "Download Station" and contains the following configuration options:

- Sharing time after download task completes:  hr
- ☒ Use public DHT network
- 
- 

**Note:** If the sharing time (larger than 0 hr) is set for a download task, the download task will be moved to Finish List after download completes and the sharing time ends.

6. Click "Set Config" and enter the number of the maximum tasks you want to download at the same time (Default number: 3).  
Enter the maximum download rate (default value is 0, which means unlimited).  
Enter the maximum upload rate (default value is 0, which means unlimited).  
Enter the port range for Download Station (default range is 6881-6999).  
Check UPnP NAT port forwarding to enable automatically port forwarding on UPnP supported gateway (default is not checked).

- :: Add new BT task
- :: Add new FTP/HTTP task
- :: Pause/Restart download task
- :: Delete download task
- :: BT download property
- :: Set Config
- :: Dump Diagnostic Information

[Increase download priority](#)
[Decrease download priority](#)

Download task	Status	Size	%	Download	Upload	Seed/Peer	Time Left
123_video.torrent	RUN	382.34 MB	0.2	22.5 KB/s	0.0 KB/s	29/31	04:48:29

Set Max Download Job - Mozilla Firefox
http://172.17.22.100:8080/cgi-bin/Qdownload/btoption.cgi?name=set

Download Station

Maximum number of downloads at the same time:

☒ When the total number of records on all the lists reaches the upper limit, overwrite the oldest records on the "Finish List".

Maximum download rate (KB/s):   
(default value is 0, which means unlimited)

Maximum upload rate (KB/s):   
(default value is 0, which means unlimited)

BitTorrent port range:  -

☐ UPnP NAT port forwarding

☐ Protocol encryption

Download time settings:

☒ Continuous download

☐ Daily download time:

☐  :  ~  :

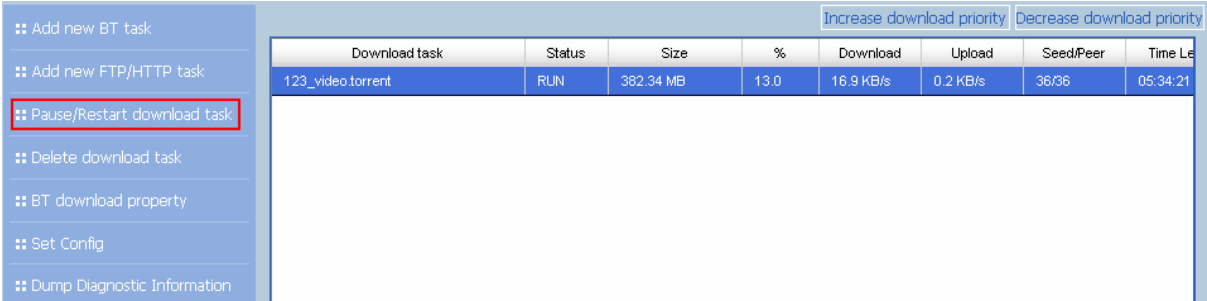
☐  :  ~  :

## Protocol Encryption

There are a number of Internet Service Providers (ISP) block or throttle BitTorrent connections for the high bandwidth it generates. By turning on "Protocol Encryption" your connections will not be distinguished by these ISPs as BitTorrent connections therefore are unable to block or throttle them and causing slow connections or even no connections. However some ISPs are starting to be able to identify these connections even if they were encrypted so users are suggested to check the Bad ISPs list on AzureusWiki and to consider switching to an ISP that does not perform BitTorrent traffic throttling or blocking.

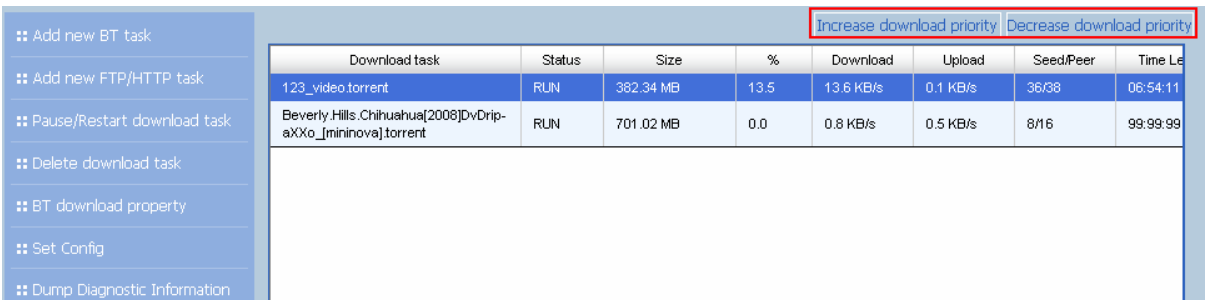
You can set the download schedule in "Download time settings". Select "Continuous download" to download the files continuously. To specify the download schedule, select "Daily download time" and enter start and end time. If the end time value is smaller than the start time, the end time will be treated as the time on the next day.

7. To pause a running download task, select the task in **View Run list** and click "Pause/ Restart download task". You can view tasks that are paused or finished in View Pause List and View Finish List respectively. To restart a paused task, select the task in **View Pause List** and click "Pause/ Restart download task".



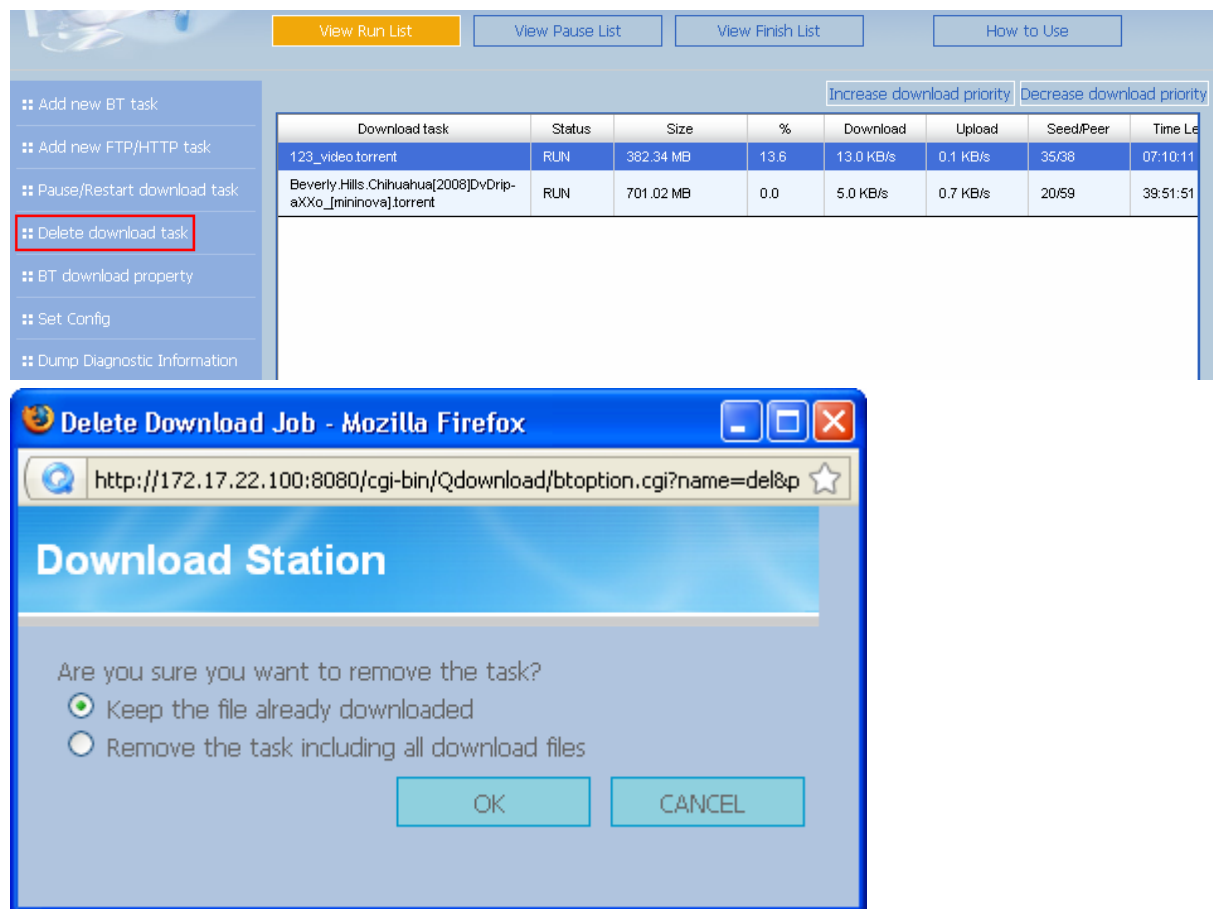
The screenshot shows the Azureus interface. On the left, a sidebar contains several buttons: "Add new BT task", "Add new FTP/HTTP task", "Pause/Restart download task" (highlighted with a red box), "Delete download task", "BT download property", "Set Config", and "Dump Diagnostic Information". On the right, there is a table with columns: "Download task", "Status", "Size", "%", "Download", "Upload", "Seed/Peer", and "Time Left". The table contains one row for "123\_video.torrent" with status "RUN", size "382.34 MB", and percentage "13.0". Above the table, there are two buttons: "Increase download priority" and "Decrease download priority".

8. You can also increase or decrease task priority by clicking "Increase download priority" and "Decrease download priority" when there are multiple download tasks.



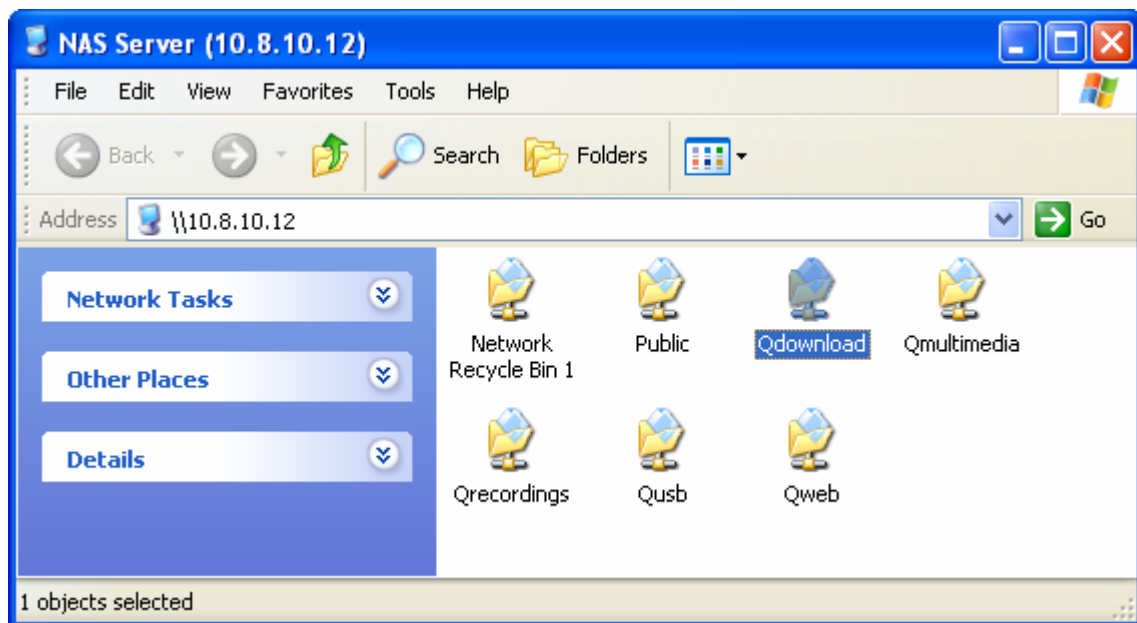
The screenshot shows the Azureus interface with multiple download tasks. The left sidebar is the same as in the previous screenshot, with "Pause/Restart download task" highlighted. The table on the right now contains two rows: "123\_video.torrent" and "Beverly Hills Chihuahua[2008]DvDrip-aXXo\_mininova.torrent". Both tasks are in "RUN" status. Above the table, the "Increase download priority" and "Decrease download priority" buttons are highlighted with a red box.

9. To delete a running, paused, or finished task, select the task and click "Delete download task". You can select to remove the download task only and retain the downloaded files, or remove the task and downloaded files.



10. To logout Download Station, click  on the top right hand corner.

11. To access the folders you have downloaded, please go to the share folder **Qdownload** of the NAS.



## Dump Diagnostic Information

To view the diagnostic details of a download task, select a task on the list and click "Dump Diagnostic Information".

- :: Add new BT task
- :: Add new FTP/HTTP task
- :: Pause/Restart download task
- :: Delete download task
- :: BT download property
- :: Set Config
- :: **Dump Diagnostic Information**

Increase download priorityDecrease download priority

Download task	Status	Size	%	Download	Upload	Seed/Peer	Time Le
123_video.torrent	RUN	382.34 MB	13.8	10.6 KB/s	6.4 KB/s	32/35	08:49:04
Beverly.Hills.Chihuahua[2008]DvDrip-aXXo_[mininova].torrent	RUN	701.02 MB	0.0	8.3 KB/s	2.5 KB/s	21/60	23:59:54

Show Task Diagnostic Message - Mozilla Firefox

http://172.17.22.100:8080/cgi-bin/Qdownload/btoption.cgi?name=show

## Download Station

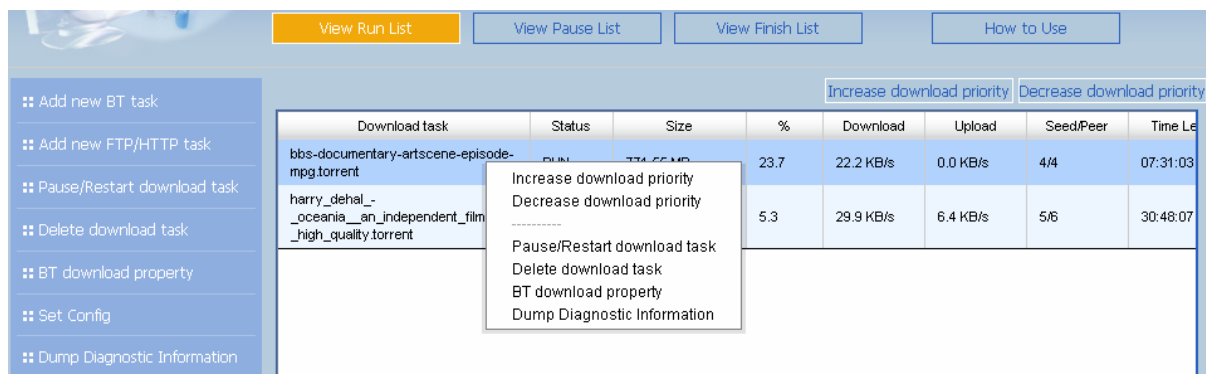
Dump Diagnostic Information:

Download task:	123_video.torrent
Size:	382.34 MB
Percent:	13.8 %
Download Totals:	52.8 MB
Upload Total:	16.9 MB
Share Time:	0 hr
Start Time:	Fri Feb 13 14:58:58 2009

No Error!

OK

You can right click the download task to configure the download settings.



The common reasons for slow BT download rate or download error are as below:

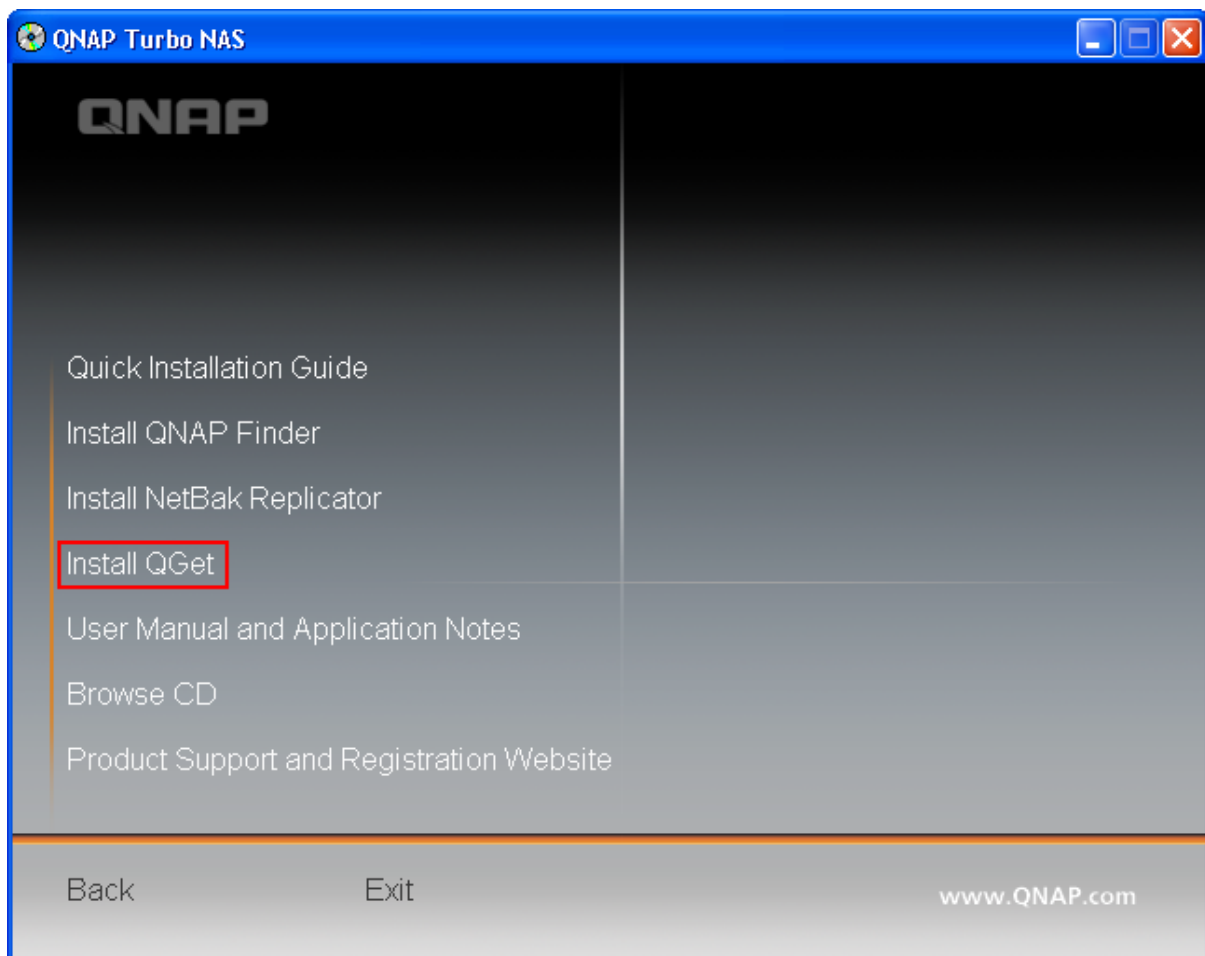
- (1) The torrent file has expired, the peers have stopped sharing this file, or there is error in the file.
- (2) The NAS has configured to use fixed IP but DNS server is not configured, or DNS server fails.
- (3) Set the maximum number of simultaneous downloads as 3-5 for the best download rate.
- (4) The NAS is located behind NAT router. The port settings have led to slow BT download rate or no response. You may try the following means to solve the problem:
  - a. Open the BitTorrent port range on NAT router manually. Forward these ports to the LAN IP of the NAS.
  - b. The new NAS firmware supports UPnP NAT port forwarding. If your NAT router supports UPnP, enable this function on the NAT. Then enable UPnP NAT port forwarding of the NAS. The BT download rate should be enhanced.



## 6.1 Use Download Software QGet

QGet is a powerful management software for maintaining the BT, HTTP and FTP download tasks of multiple TS series NAS servers via LAN or WAN. By using QGet, you no longer need to login the Download Station web interface of multiple servers and manage the settings one by one. Simply install QGet on any computer running Windows 2000/XP or Mac, you can manage the download tasks of all your NAS servers.

1. To use QGet, install the software from the product CD-ROM.



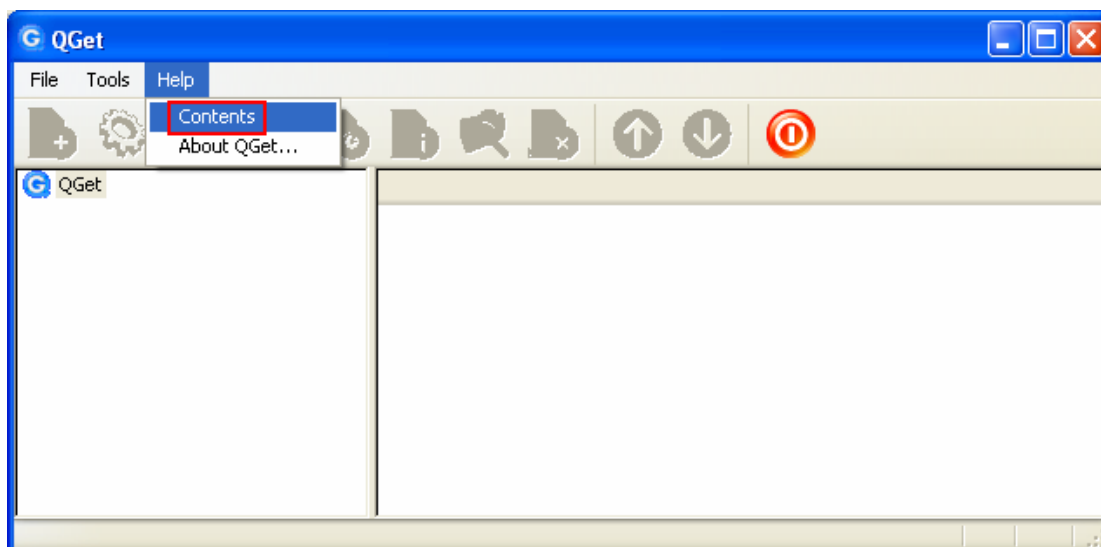
2. Follow the instructions to install QGet.



3. Run QGet from the installed location.



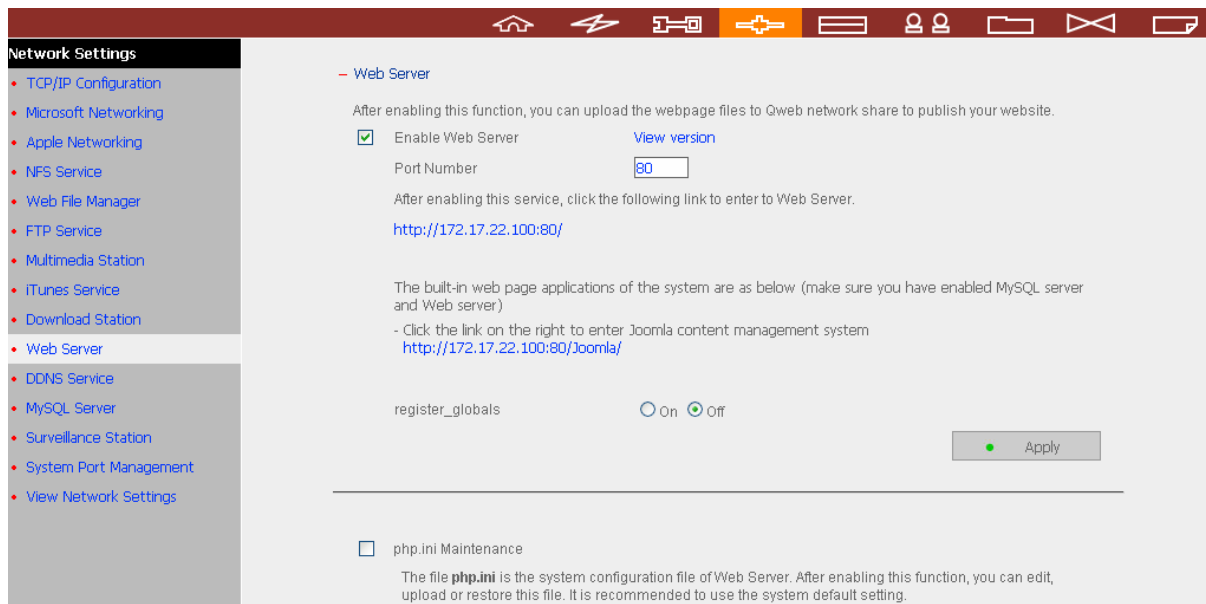
4. For the details of using QGet, please refer to the online help of the software.



## Chapter 7 Web Server

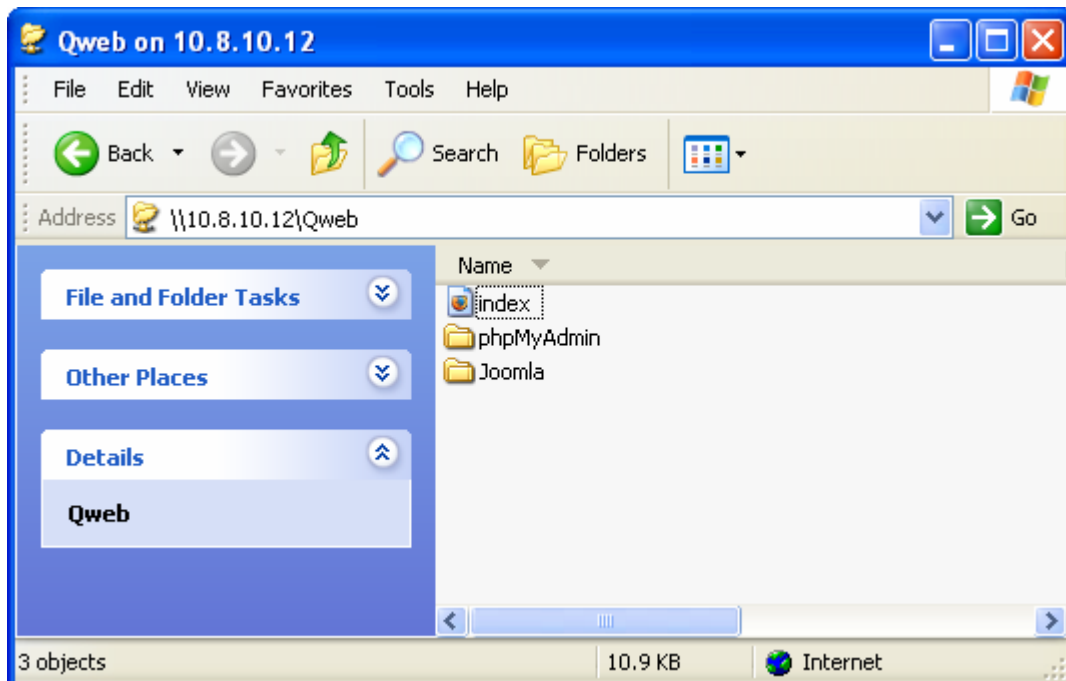
The NAS enables you to upload web pages and manage your own website easily by Web Server function. It also supports Joomla!, PHP and MySQL/SQLite for you to establish an interactive website.

1. To use Web Server, make sure a SATA disk is installed correctly in the NAS. A share folder **Qweb** will be created. Enable Web Server function and enter the port number in **Network Settings**.

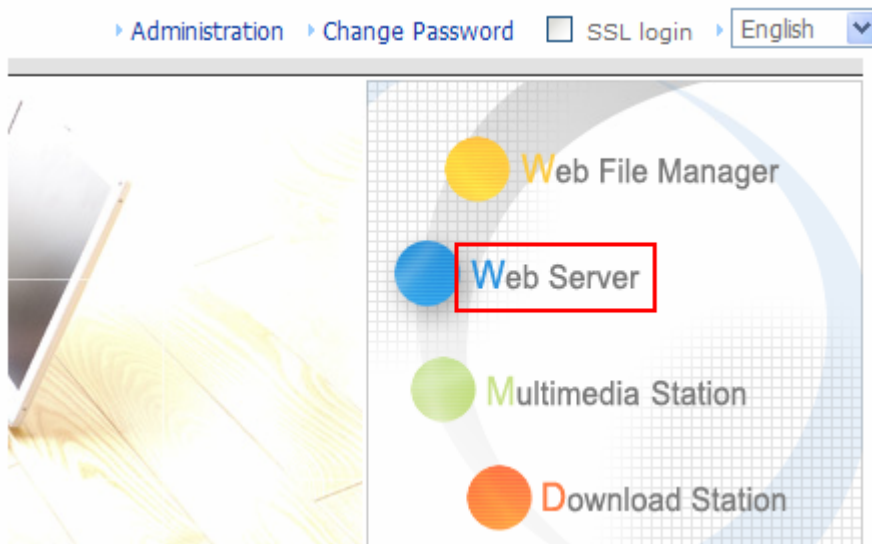


2. You can upload your HTML files to the folder Qweb by the following methods:
  - a. By using samba: You can open a web browser and type **\\[NAS IP]\Qweb** or **\\[NAS name]\Qweb**. Login the folder and upload your HTML files.
  - b. By FTP: You can login FTP service and upload your HTML files to the folder (please refer to Chapter 8).
  - c. By Web File Manager: You can login Web File Manager and upload your HTML files to the folder (please refer to Chapter 9).

The file index.html, index.htm or index.php will be the home path of your web page.



3. Click the link **http://NAS IP/** on Web Server page or click "Web Server" on the login page of the NAS to access the web page you upload. Note that when Web Server is enabled, you have to type [http://NAS IP address:8080] in your web browser to access the login page of the NAS.



## MySQL Management

The first time you install the system, the phpMyAdmin software is automatically installed as the MySQL management tool. When you update the firmware in the future, phpMyAdmin will not be re-installed and your data on the database will not be overwritten or changed.

The phpMyAdmin program files are created in the Qweb share folders. You can change the folder name and access the database by entering the URL in the browser. However, the link on the web management interface is not changed.

**Note:** The default user name of MySQL is "root". The password is "admin". Please change your root password immediately after logging in to the phpMyAdmin management interface.

## SQLite Management

SQLiteManager is a multilingual web-based tool to manage SQLite databases and can be downloaded from <http://www.sqlitemanager.org/>.

Please follow the steps below or refer to the INSTALL file in the downloaded SQLiteManager-\*.tar.gz<sup>?</sup> to install the SQLiteManager.

- (1) Unpack your download file SQLiteManager-\*.tar.gz.
- (2) Upload the unpacked folder **SQLiteManager-\*** to **\\NAS IP\Qweb\**.
- (3) Open your web browser and go to **http://NAS IP/SQLiteManager-\*/**.

<sup>?</sup>: The symbol "\*" refers to the version number of SQLiteManager.

## Chapter 8 FTP Server

The NAS supports FTP service. To use FTP service, enable this function in “Network Settings” and follow the steps below:

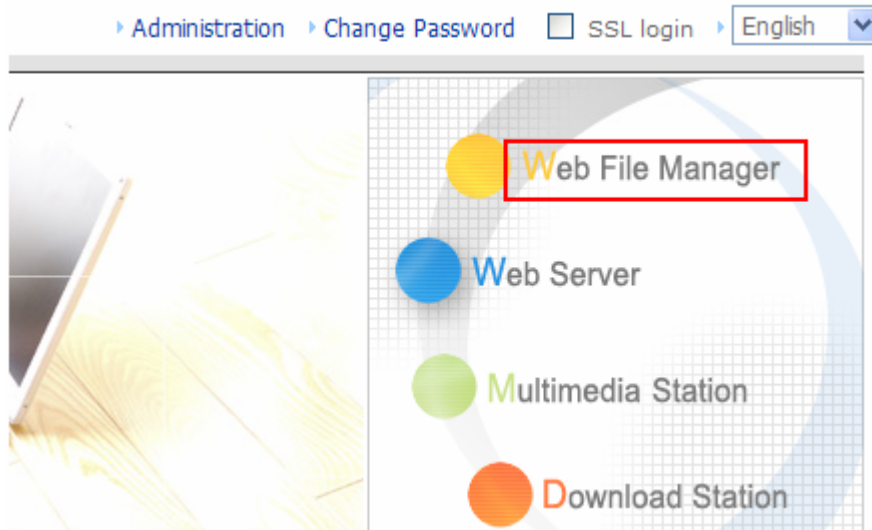
The screenshot shows the 'Network Settings' interface with a sidebar on the left and a main configuration area on the right. The sidebar lists various network services, with 'FTP Service' highlighted. The main area is titled 'FTP Service' and contains several configuration options:

- Enable FTP Service:** A checkbox that is checked.
- Protocol type:** Two radio buttons: 'FTP (standard)' (checked) and 'FTP with SSL/TLS (Explicit)' (unchecked).
- Port Number:** A text input field containing '21'.
- Unicode Support:** Two radio buttons: 'Yes' (unchecked) and 'No' (checked).
- Enable Anonymous:** Two radio buttons: 'Yes' (unchecked) and 'No' (checked).
- Passive FTP Port Range:** Two radio buttons: 'Use the default port range (55536 - 56559)' (checked) and 'Define port range: 55536 - 56559' (unchecked).
- Respond with external IP address for passive FTP connection request:** A checkbox that is unchecked.
- External IP address:** A text input field.
- Maximum number of all FTP connections:** A text input field containing '30'.
- Maximum number of connections for a single account:** A text input field containing '10'.
- Enable FTP transfer limitation(0 means unlimited):** A checkbox that is unchecked.
- Single connection: Maximum download rate (KB/s):** A text input field containing '0'.
- Maximum upload rate (KB/s):** A text input field containing '0'.

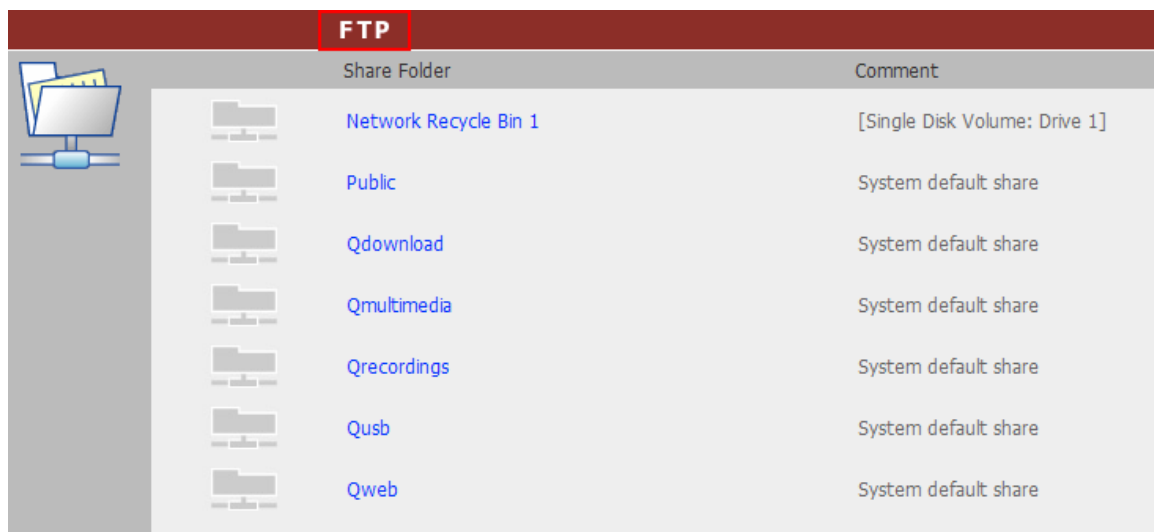
**Note:** If your FTP client does not support Unicode, please select "No" for Unicode Support and select a supported filename encoding from [Filename Encoding Setting] under [System Settings] so that the folders and files on FTP can be properly shown.

1. Open an IE browser and enter **ftp://[NAS IP]** or **ftp://[NAS name]**. OR

2. By Web File Manager of the NAS.
  - a. Go to NAS administration page and click "Web File Manager". Enter user name and password to login the NAS.

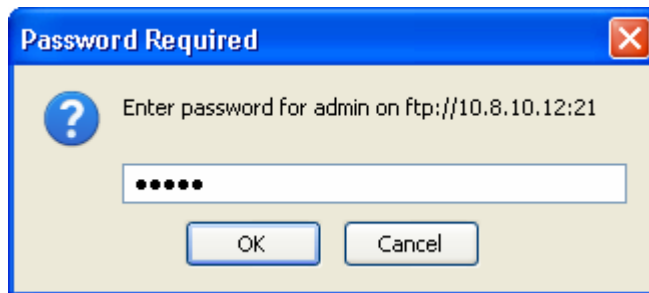


- b. Click "FTP".

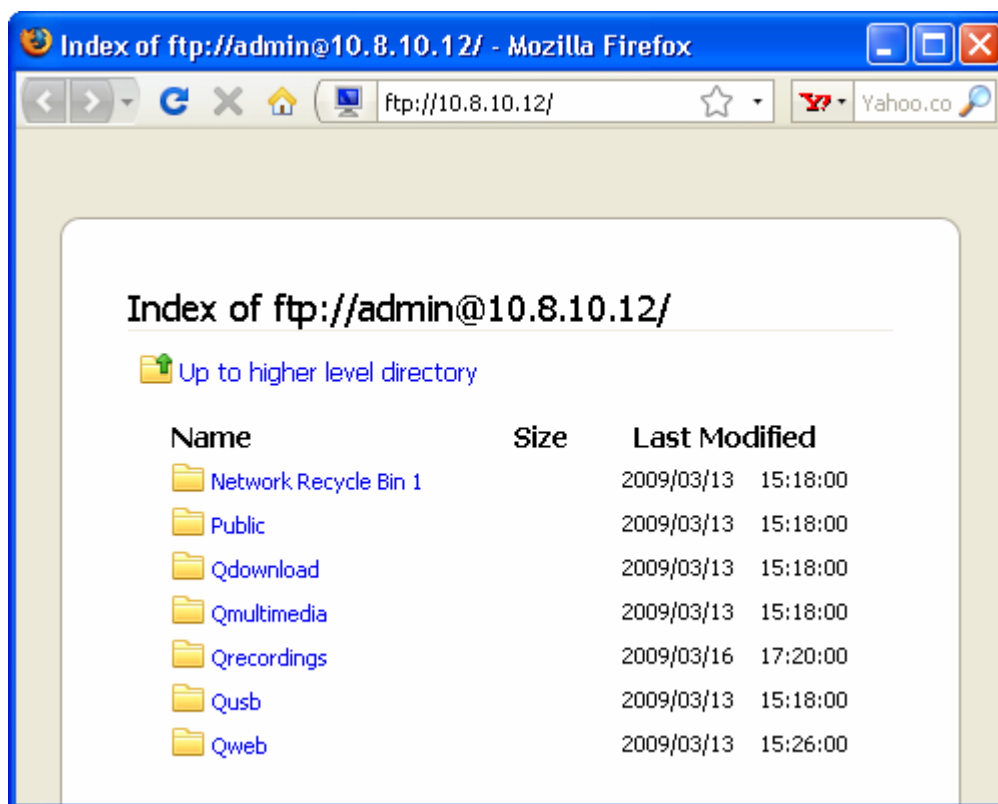




- c. Enter the user name and password to login FTP service.



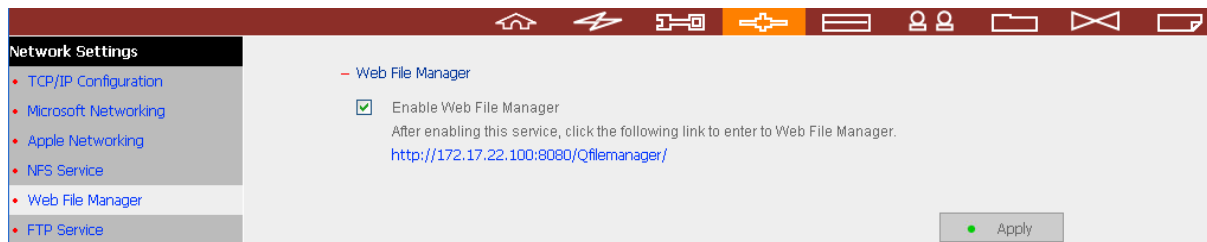
- d. You can start to use FTP service.



## Chapter 9 Web File Manager

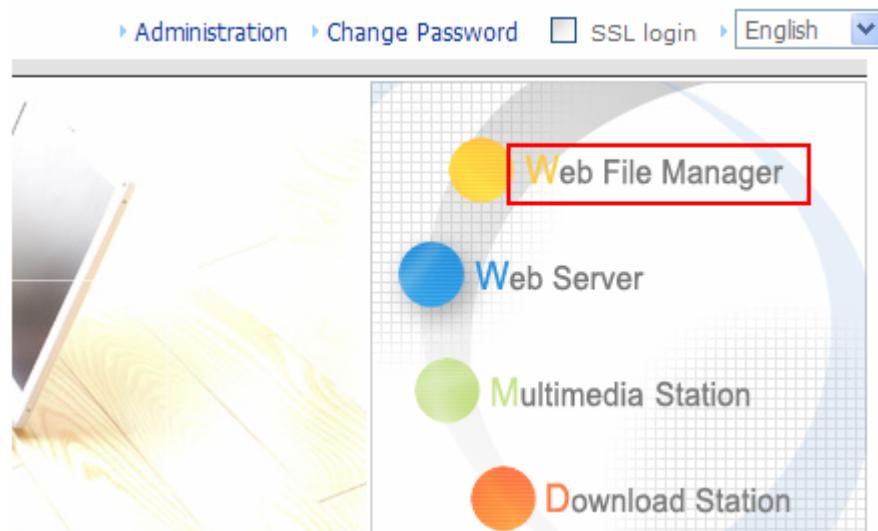
### Using Web File Manager

To use Web File Manager, enable web service in Network Settings first.



Launch the web browser and go to the NAS administration page. Click "Web File Manager" and enter the correct login name and password. You can login as "guest" to access the network shares open to guest access on the NAS. The login password of guest is **guest**.

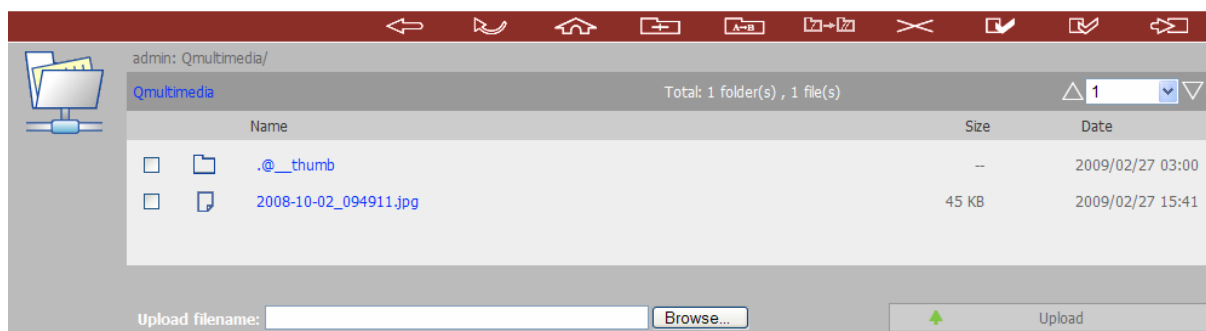
**Note:** Make sure a network share has been created before using Web File Manager.



Select a network share.




You can organize network share folders of the NAS. With Web File Manager, you can upload, rename, or delete files and folders in the network shares.




## View files online

Click a file displayed on the web page. The information of the file will be displayed. If your browser does not support the file format, a download window will pop up automatically. Download the file and you can open it on your PC.


## Create folder

- Select a network share or folder in which you want to create a new folder.
- Click  (Create Folder) on the toolbar.
- Enter the name of the new folder and click "OK".

### Rename file or folder

- i. Select a file or folder to rename.
- ii. Click  (Rename) on the toolbar.
- iii. Enter the new file or folder name and click "OK".

### Delete file or folder

- i. Select a file or folder to delete.
- ii. Click  (Delete) on the toolbar.
- iii. Confirm to delete the file or folder.

To delete all files and folders, click  (Select All) and  (Delete).


### Upload file

- i. Open the folder to upload file to.
- ii. Click "Browse" to select the file.
- iii. Click "Upload".

### Download file

- i. Select a file to download.
- ii. Right click the mouse and select "Save Target As" to save the file.

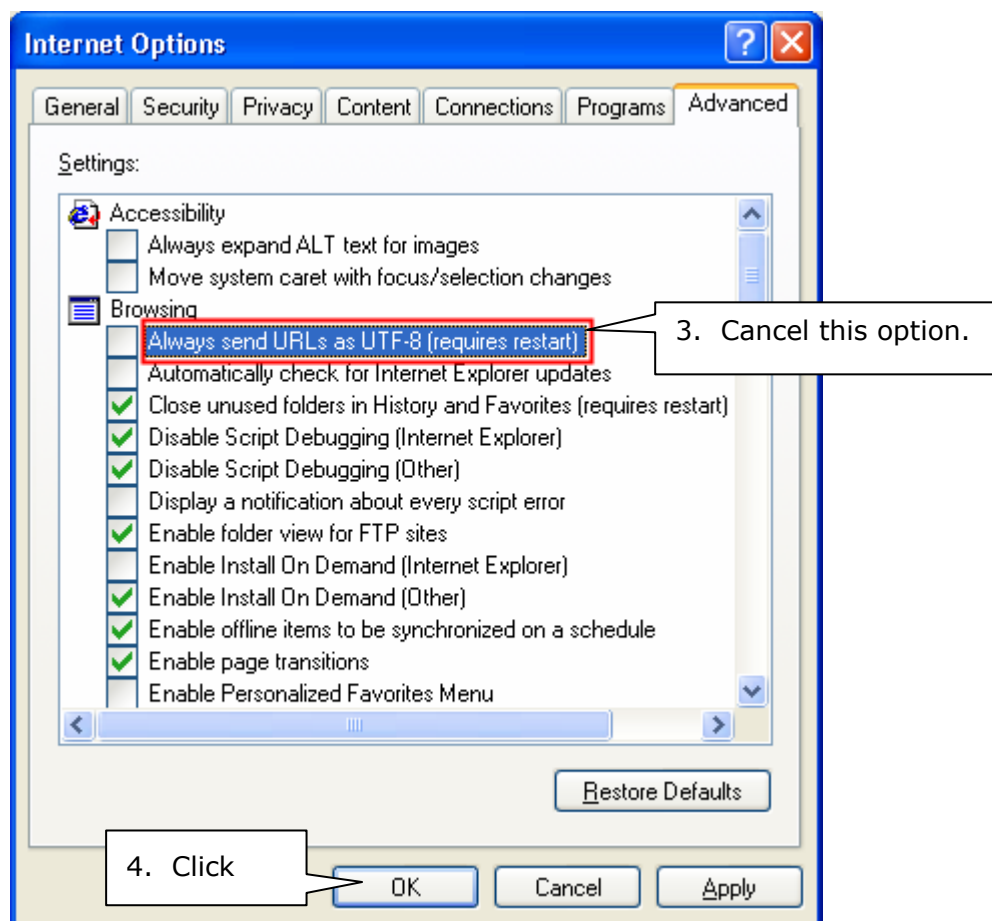
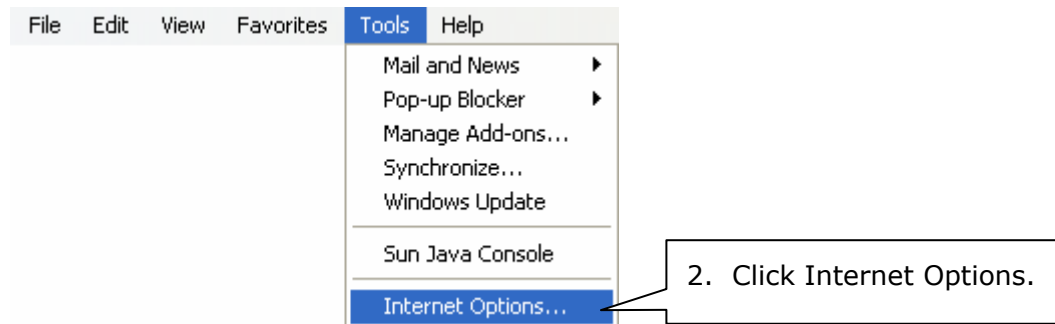
### Logout

To exit Web File Manager, click  (Logout).

## View Files Named in Local Language













To view files named in Chinese, you may have to configure the browser settings. Take Internet Explorer as an example, follow the steps below to configure the settings.

1. Click "Tools" in IE browser.



5. Restart the browser.

## Web File Manager Icons

Icon	Description
	Return to the parent folder
	Refresh the current page
	Return to network share list home page
	Create folder
	Rename file or folder
	Delete file or folder
	Select all
	Cancel selection
	Logout
	Full access network share folder
	Read-only network share folder
	Malfunction network share folder

# Chapter 10 NetBak Replicator

NetBak Replicator is a powerful program installed in user's system (Windows® OS only) for data backup. You can back up any files or folders on local PC to specified share folder on the NAS by LAN or WAN.

## Main Functions

### 1. Backup

- Instant Backup

You can select files and folders on local PC and back up files to specified network share folder on the NAS immediately.

- File Filter

You can select particular file types to be excluded from backup. The system will filter all files belonging to these file types when backing up data.

- Schedule

You can specify a schedule for backing up data with this option, e.g. 12:00 every day or 05:00 every Saturday.

- Monitor

When this option is enabled, the system will upload all files or folders to the server instantly for backup when the files or folders are modified.

### 2. Restore

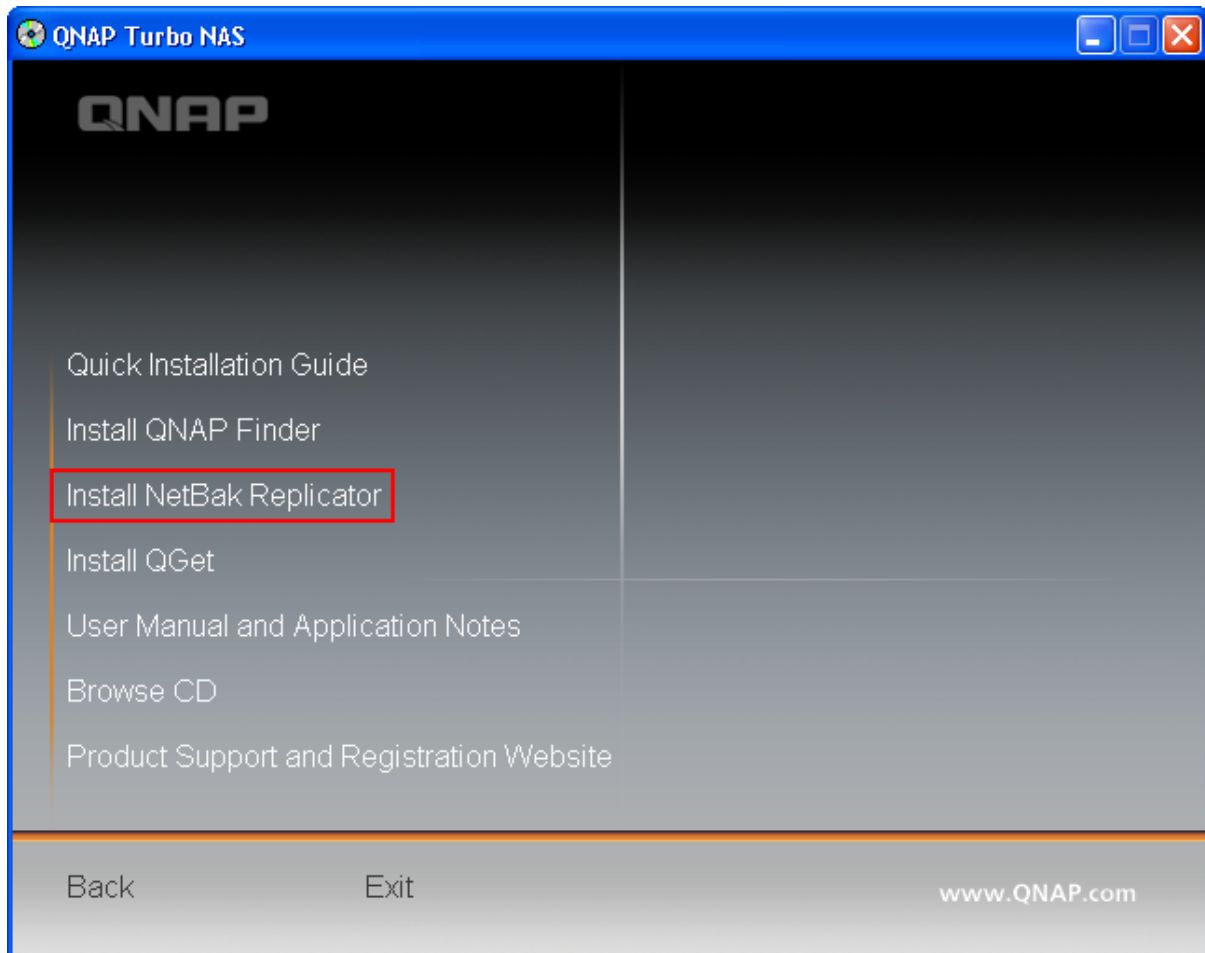
Select this option to restore backed up data to the original location of the file or to a new directory.

### 3. Log

Enable this option to record events of NetBak Replicator, e.g. the time when NetBak Replicator starts and terminates.

## Install NetBak Replicator

1. Run the NAS CD-ROM. Select "Install NetBak Replicator".



2. Follow the steps to install NetBak Replicator.

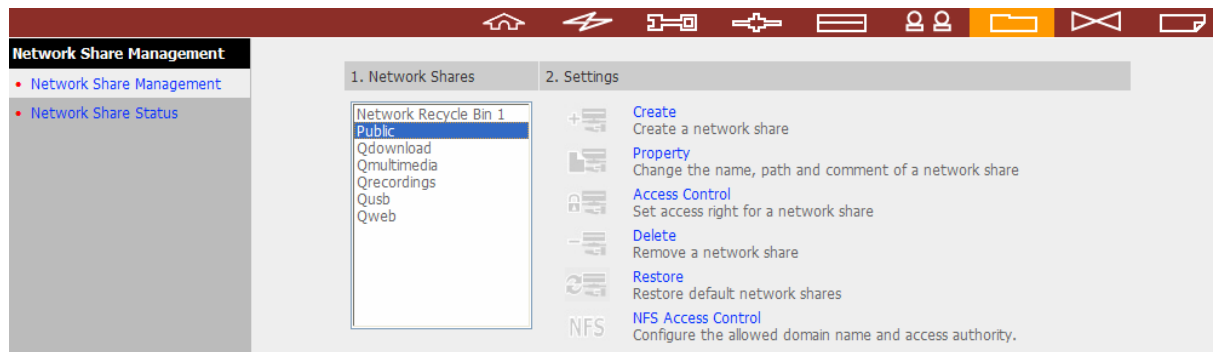



3. Upon successful installation, a shortcut icon will be shown on the Desktop. Double click the icon to run NetBak Replicator.

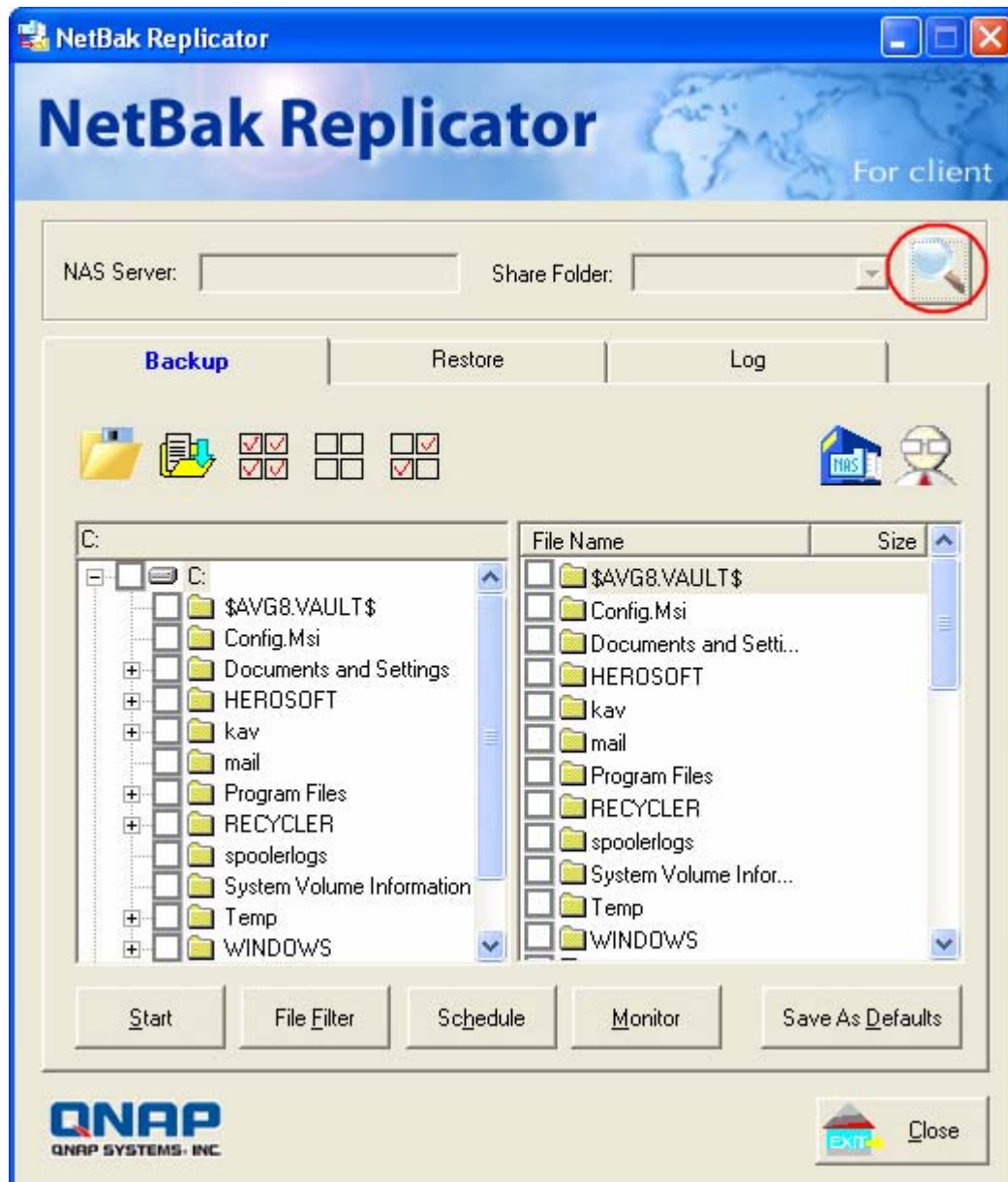


## Use NetBak Replicator

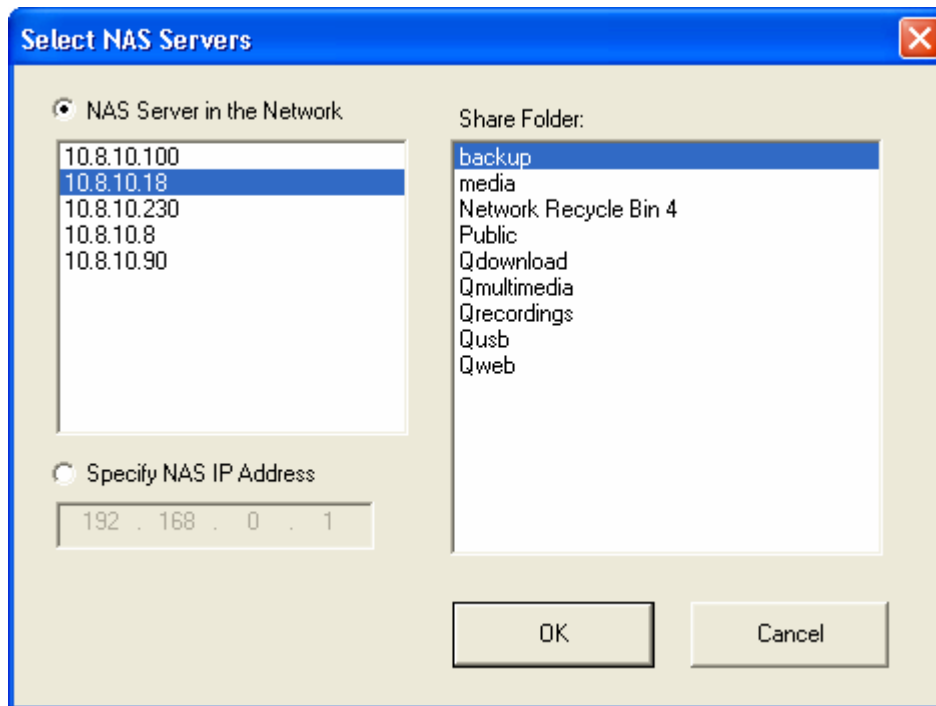
1. Before using NetBak Replicator, please login the NAS administration and go to "Network Share Management" to create a share folder for backup. Make sure the share folder is open for everyone access or you login the share folder with an authorized account or administrator by NetBak Replicator.



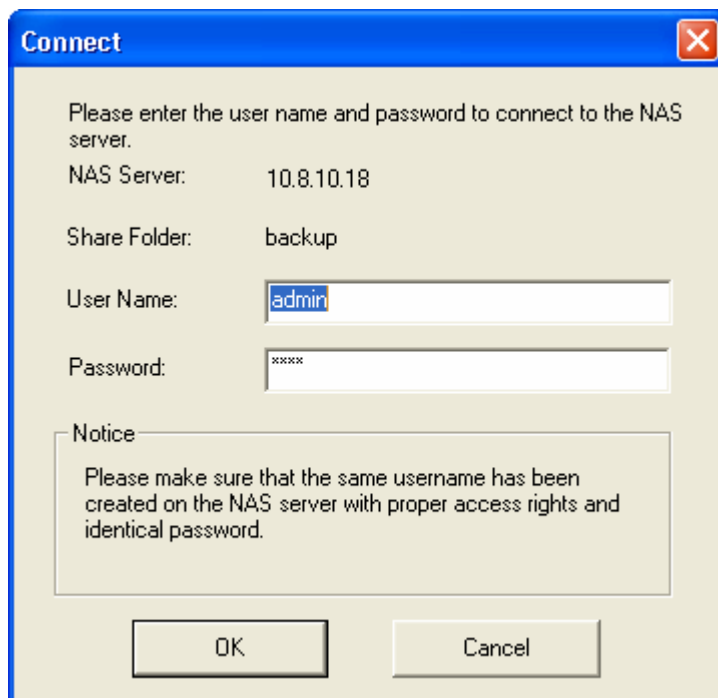
2. Run NetBak Replicator. Click . All the NAS and their share folders within the network will be displayed.



- When the following window appears, all the NAS in the LAN will appear on the left list. Select a server and a share folder on the right. NetBak Replicator also supports backup via WAN, you can enter the IP address of the NAS for data backup directly and select a share folder. Then click "OK".










- Enter the user name and password to login the server.



- You can start the backup procedure upon successful connection to the NAS.

## Description of Buttons on NetBak Replicator

	Open Configuration: Open a previously saved NetBak Replicator configuration.
	Save Configuration: Save the settings on NetBak Replicator. The file will be named as *.rpr
	Select All: Select all items in the window.
	Clear All: Clear selection.
	Select My Document: Select all folders in My Document.
	Open NAS Backup Folder: This button allows users to find out where the files were backed up, and check or manage the archived files manually.
	Advanced Backup: Advanced Backup allows power user to back up a single folder with more advanced options.

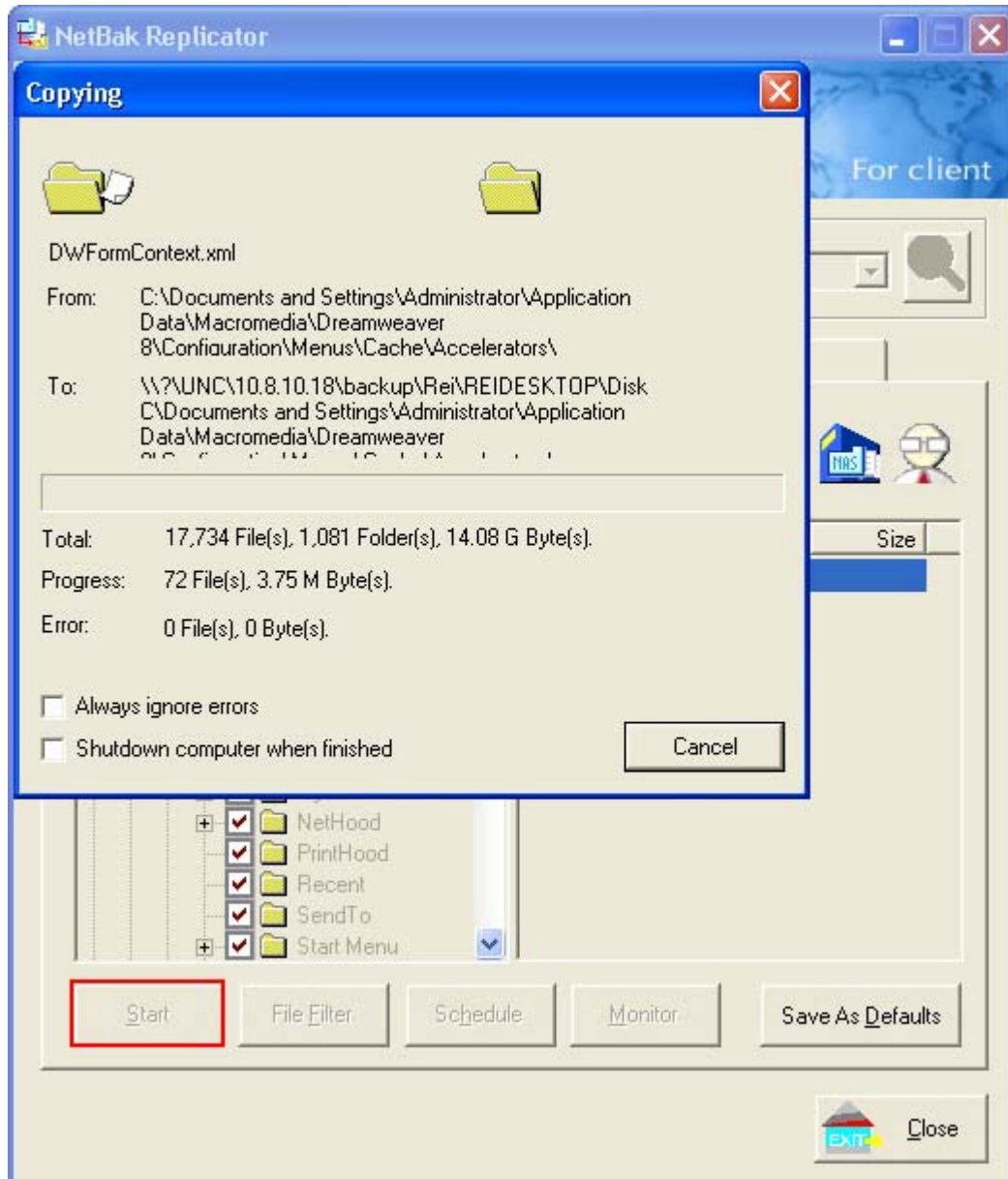
- **Backup**

Select the files and folders for backup.



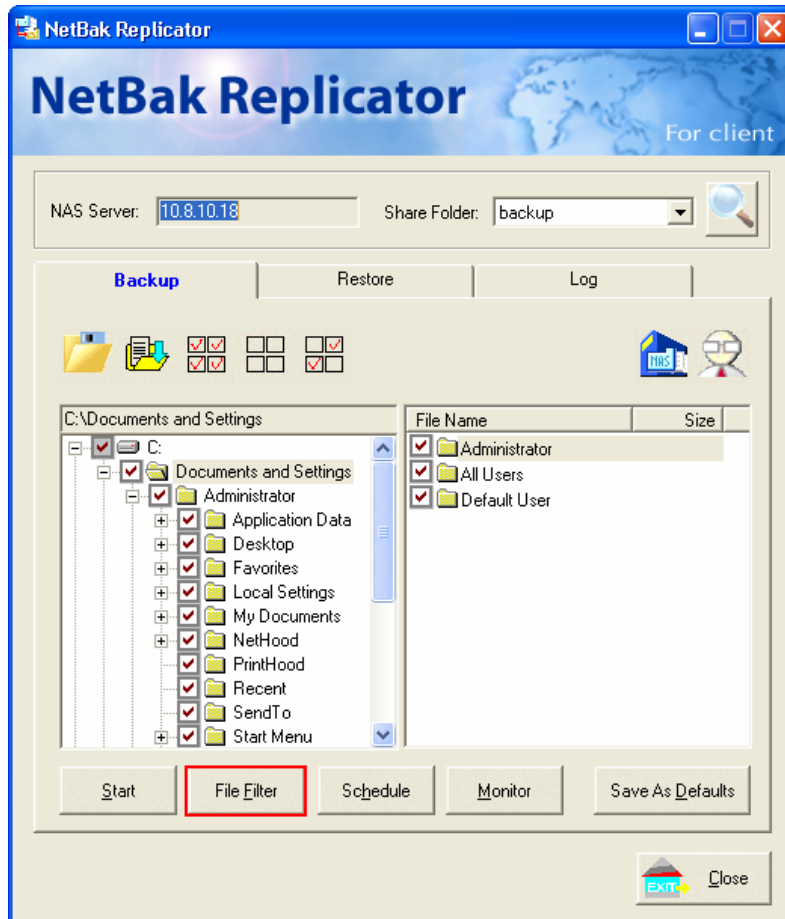
✓ Start

When you have selected the files for backup to the NAS, click "Start". The program will start to copy the selected files to the specified share folder on the NAS.



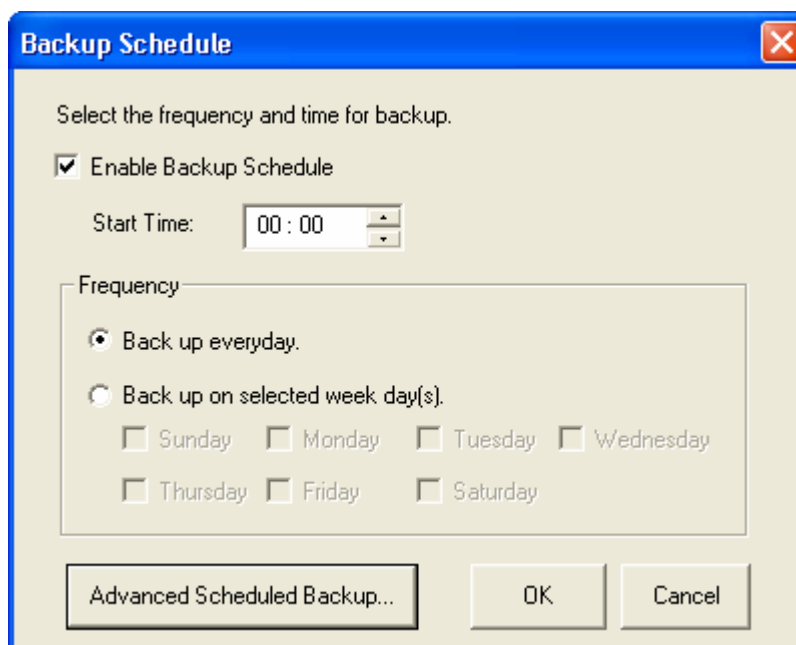
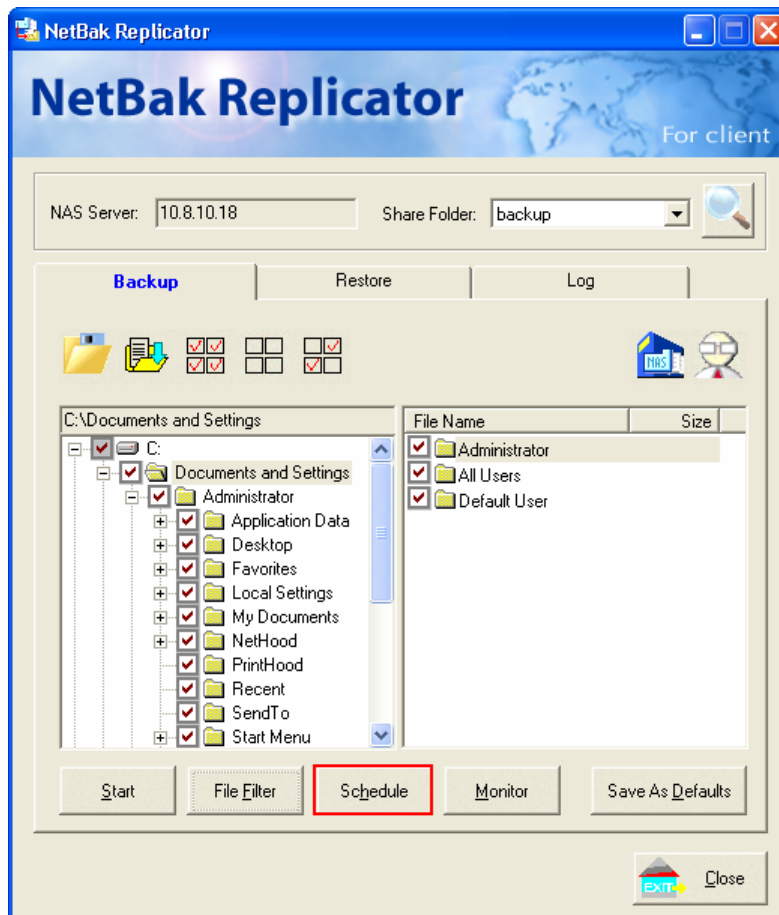
✓ File Filter

Click "File Filter" on NetBak Replicator main page to select file format to be skipped from backup. Then click "OK".




✓ Schedule

Click "Schedule" on NetBak Replicator main page. Then check the box "Enable Backup Schedule" and select the frequency and time for backup. Click "OK" to confirm.





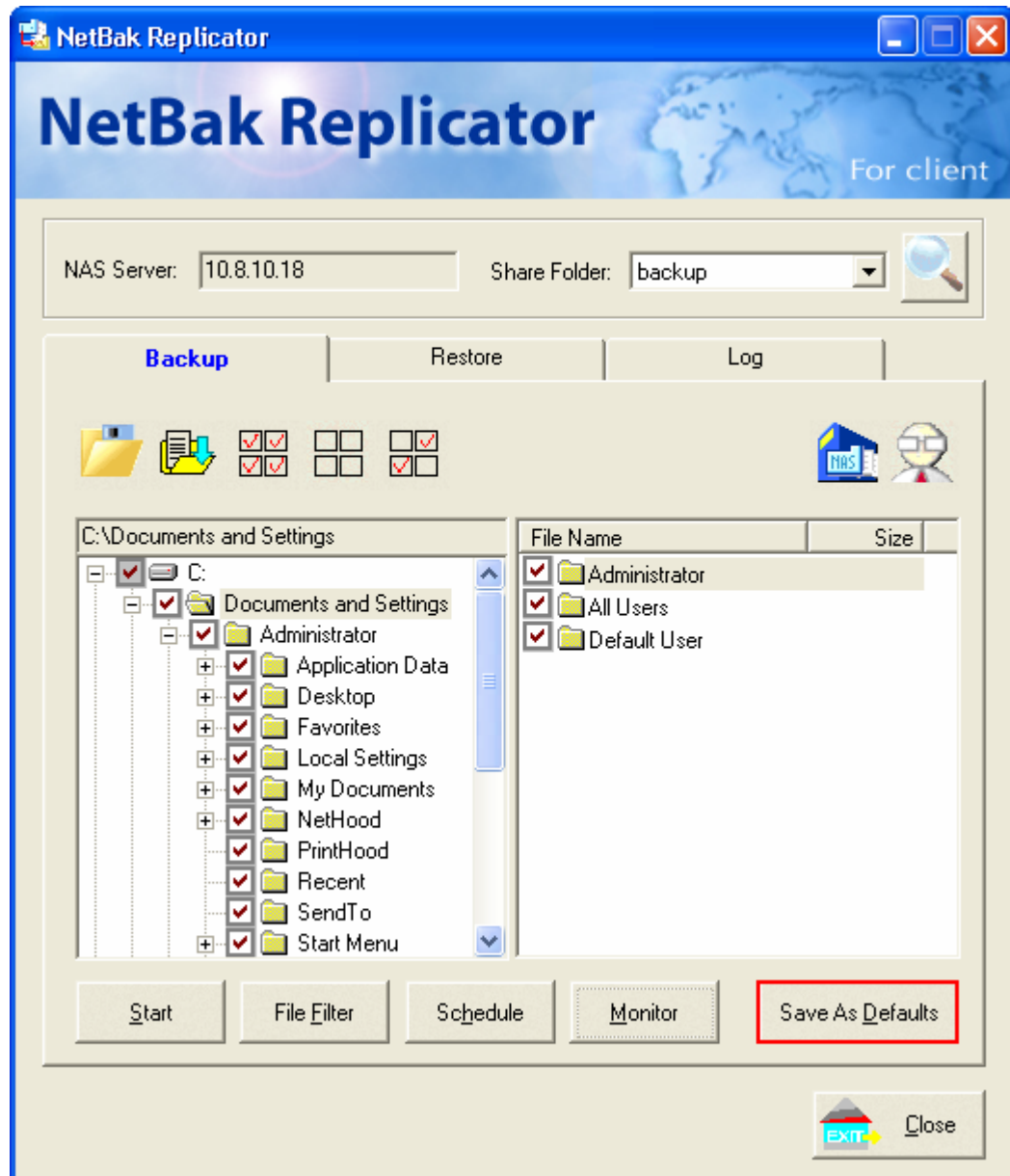
✓ Monitor

Select a folder for monitoring. When this option is enabled, the system will upload all files or folders to the server instantly for backup when the files or folders are modified. Other files will be gray and cannot be selected. Click "Monitor" again to cancel monitoring. An icon  will appear on task bar of Windows® when monitoring is in process.




✓ Initialize Configuration

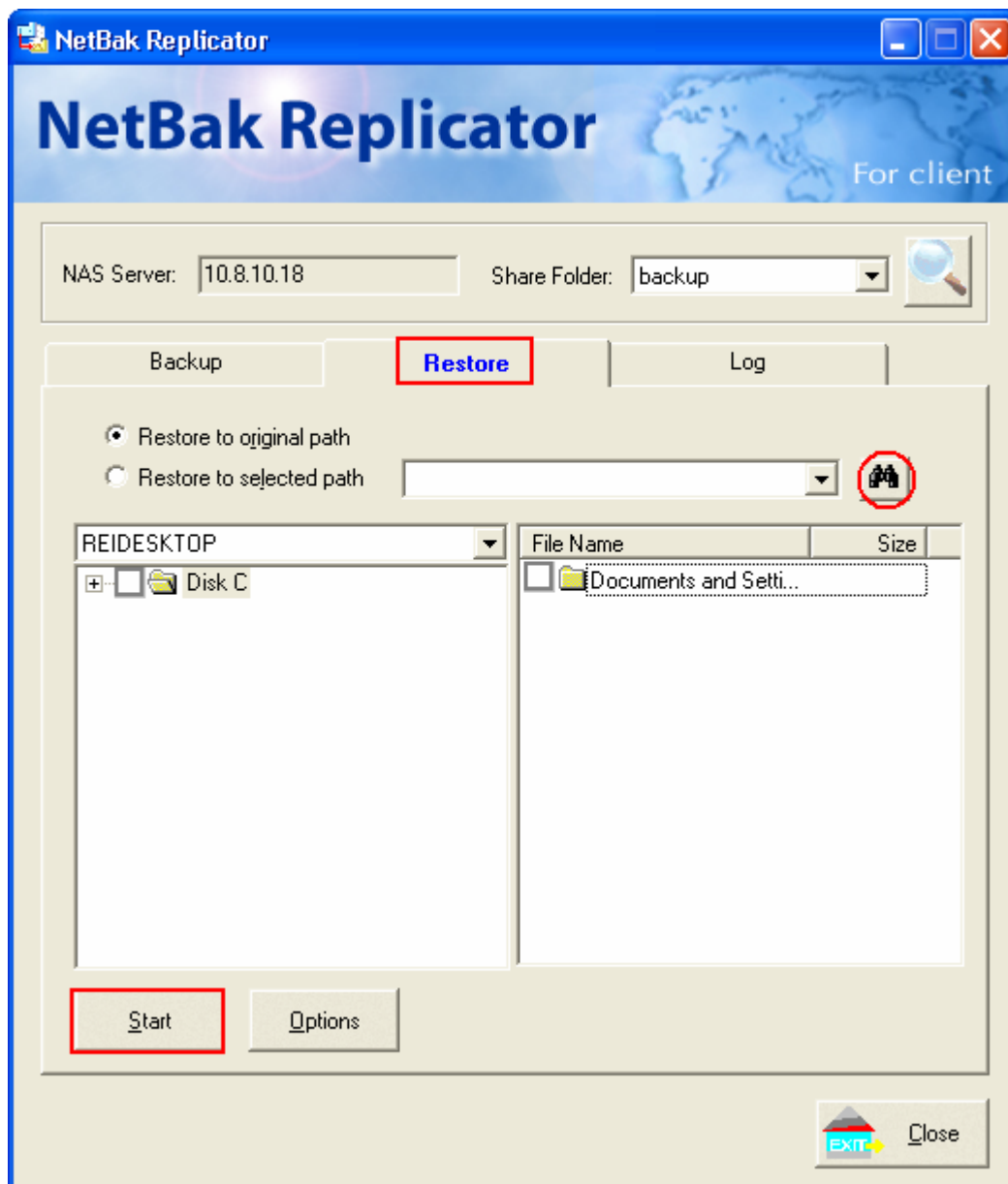
When using this function, NetBak Replicator will record all current settings of the user, including whether or not monitor function is enabled. When the user login again, this program will load the previous recorded settings for users to manage data backup.



- **Restore**

Please follow the steps below to restore files from the NAS to your PC.

- a. Restore to original position: Select the location that the data will be restored to.
- b. Select new restore position: Click  to select the directory to restore data to or select a previously chosen location from the drop-down menu.
- c. Select the folder(s) and sub-folder(s) for restoring data on the right list and click "Start".



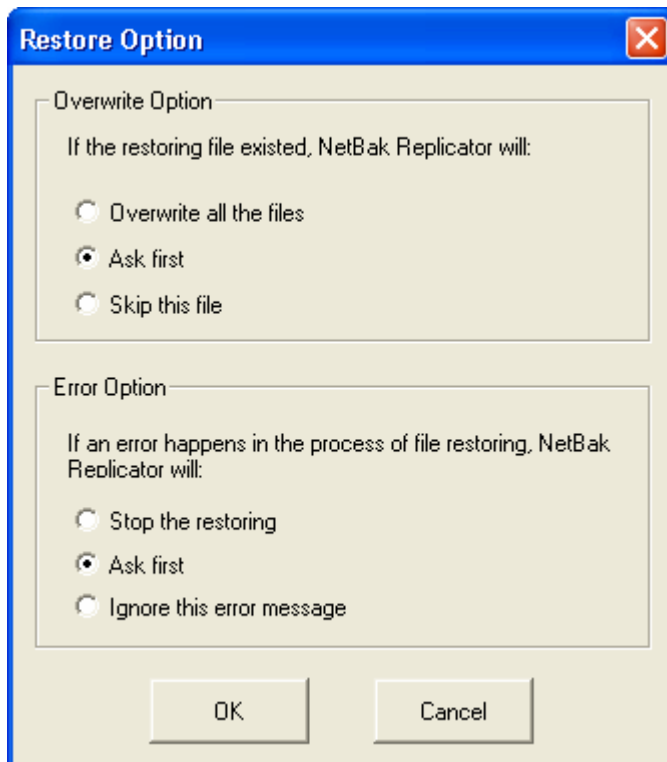
d. Option: Select recovery option and error option.

If the restoring file existed, NetBak Replicator will:

- ✓ Overwrite all the files
- ✓ Ask first
- ✓ Skip this file

If an error happens in the process of file restoring, NetBak Replicator will:

- ✓ Stop the restoring
- ✓ Ask first
- ✓ Ignore this error message



- **Log**

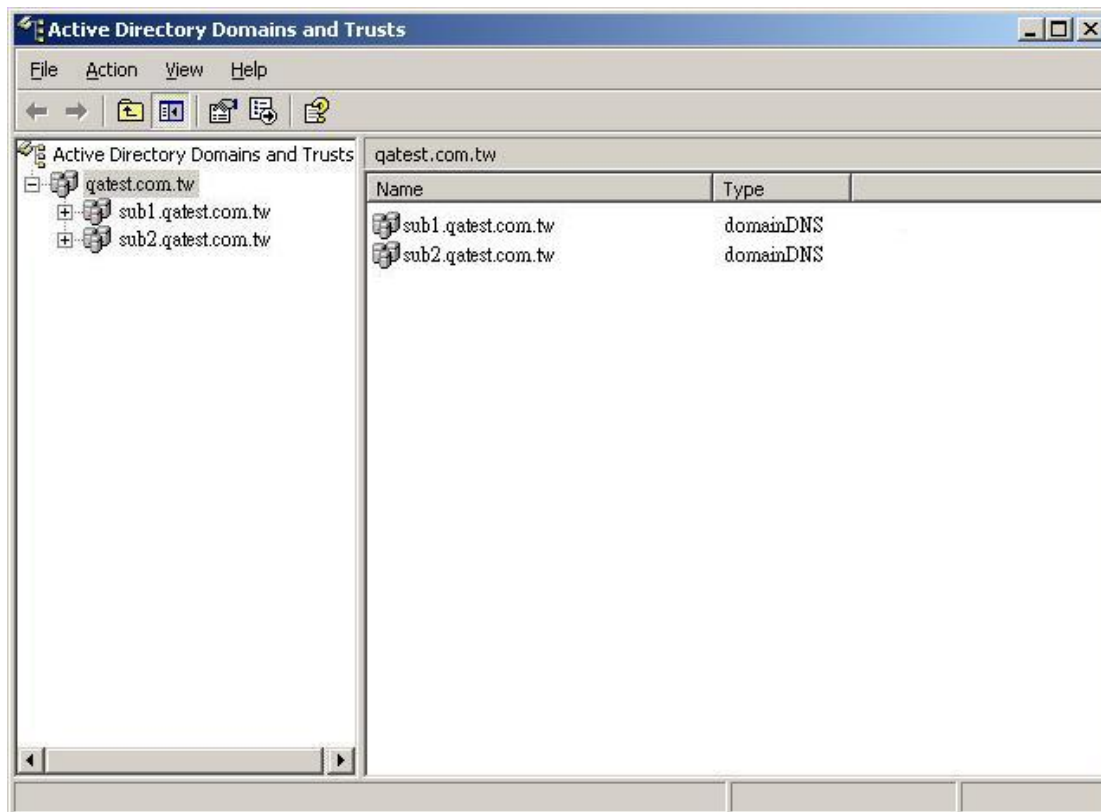
- a. Save As...: To save all logs on NetBak Replicator, click this button. All logs will be saved as text file.
- b. Clear All: Click this button to clear all logs.
- c. Option: Select the type of logs to be recorded— "Record all logs" or "Record error logs only".



## Chapter 11 Configuring AD Authentication

The NAS supports Active Directory (AD). You can import the user accounts from Windows AD domain to the NAS. This saves your time to create users one by one. The example below demonstrates how to use this service.

We have two domains qatest.com.tw and sub2.qatest.com.tw controlled by Windows 2003 server, and a domain sub1.qatest.com.tw controlled by Windows 2000 server.



Please make sure you have enabled the Active Directory Service on the Windows Server and check the following items:

- The NAS's DNS server setting must be assigned to AD server.
- The NAS and AD server can synchronize only if their time difference is less than 5 minutes.
- The NAS and AD server will synchronize every 5 minutes. To configure the settings manually, the NAS has to be set as standalone mode and then added to AD domain.
- After adding to AD domain, you must login as Domain\_name\Username to access Network Neighborhood. Local users of the NAS cannot access the server by Network Neighborhood.
- It is suggested to use Windows 2000 Service Pack 4, or Windows 2003 Service Pack 1.
- When the NAS is added to AD domain, the authority of "everyone" will not work, "everyone" is the default account of the NAS, but is not supported in AD domain. Therefore the authority has to be reset.
- The IP address of the AD server should be recorded in the DNS settings on the AD server.
- You must change the password of "admin" after you create "Active Directory" service on the AD server.
- The DNS server on the AD Server should have two records on it. For example, when the AD server name is 2003tc.testad.com, the records will be:  
2003tc.testad.com           A       192.168.1.100  
Testad.com       A       192.168.1.100  
One is "A record" for AD server, and the other is the domain "A record" for DNS queries.

## Adding NAS to Windows Server 2003 Active Directory Domain

1. Go to TCP/IP Configuration in Network Settings. Enter the IP address of primary DNS server. You can inquire AD domain via this DNS server.

**TCP/IP Configuration**

Configuration of Network Interfaces    ☒ Failover    ☐ Load balancing    ☐ Standalone

**Failover**

Network transfer rate: Auto-negotiation

☐ Obtain IP address settings automatically via DHCP

☒ Use static IP address

Fixed IP Address: 172 . 17 . 21 . 123

Subnet Mask: 255 . 255 . 254 . 0

Default Gateway: 172 . 17 . 20 . 1

Primary DNS Server: 172 . 17 . 22 . 208

Secondary DNS Server: 0 . 0 . 0 . 0

2. Go to Microsoft Networking of Network Settings. Enable AD Domain Member, and enter the domain name and the user name with administrator access right to that domain.

**Microsoft Networking**

☒ Enable file service for Microsoft networking

☐ Standalone Server

☒ AD Domain Member

Server Description: NAS Server

Workgroup: QNAP

AD Server Name: ad2008

Domain Name: qnap.com

Domain Username: qnaptest

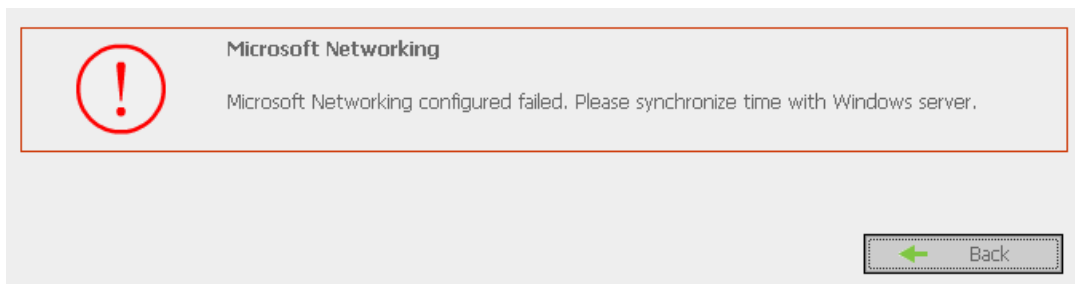
Password: .....



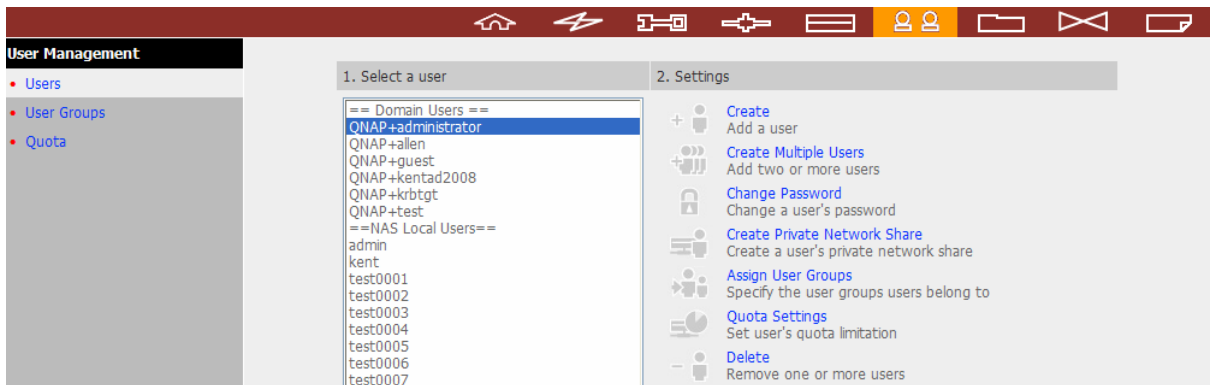
**Note:**

- a. Make sure that a fully qualified domain name such as qnap.com has been filled in.
- b. Make sure the user name with administrator access right to that domain.

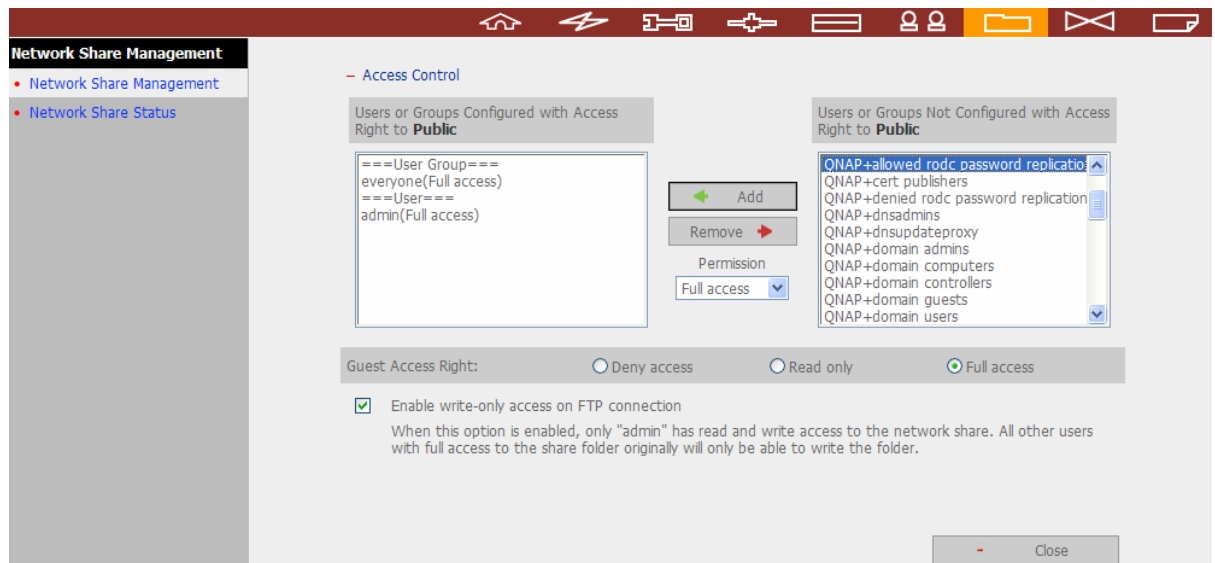
3. When the following message appears after applying the settings in step 2, check the time zone settings. Make sure the difference of your time and that of AD server is less than 5 minutes. If the time difference is larger than 5 minutes, you will not be able to add the domain member.



4. Upon successful adding of domain member, you can view the list for domain users and local users in User Management.

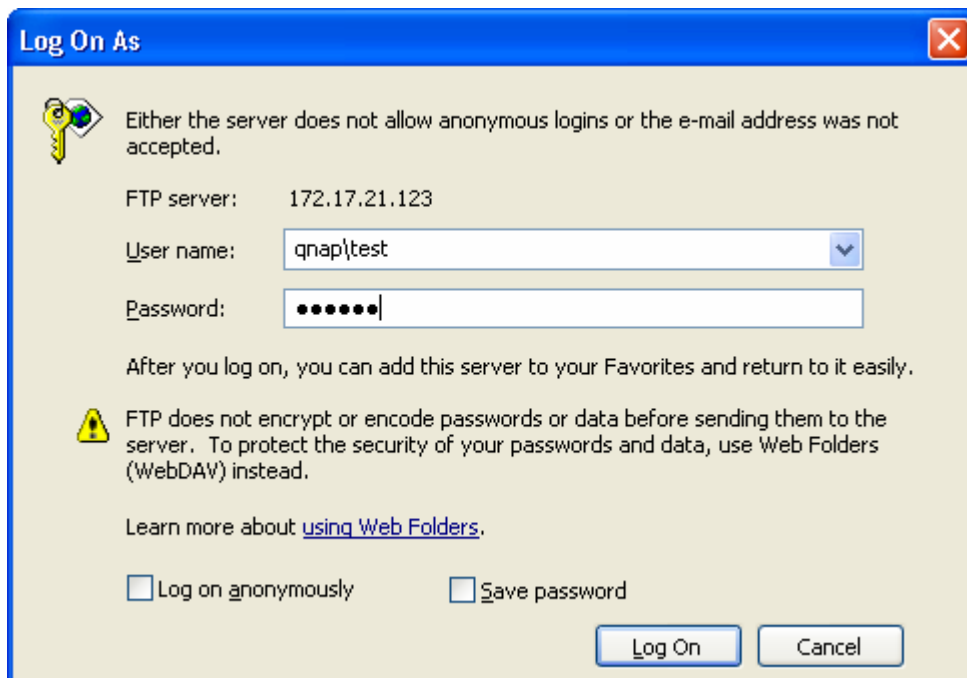


5. Go to Access Control in Network Share Management to configure the access control right of AD users for all available network shares.



## Using AD users to access services

To access services like FTP, Network Neighborhood, or Apple Talk with an AD user account, add **DomainName\** before the user name when logging in.



## Chapter 12 Access NAS via Linux OS

In addition to Microsoft and Mac OS, the NAS also supports Linux systems through the NFS service:

1. In Linux, run the following command:

```
mount -t nfs <NAS IP address>:/<Network Share Name> <Directory to Mount>
```

For example, if the IP address of your NAS is 192.168.0.1 and you want to link the network share folder "public" under the /mnt/pub directory, use the following command:

```
mount -t nfs 192.168.0.1:/public /mnt/pub
```

**Note:** You must login as "root" user to initiate the above command.

2. Login as the user ID you define, you can use the mounted directory to access your network share files.

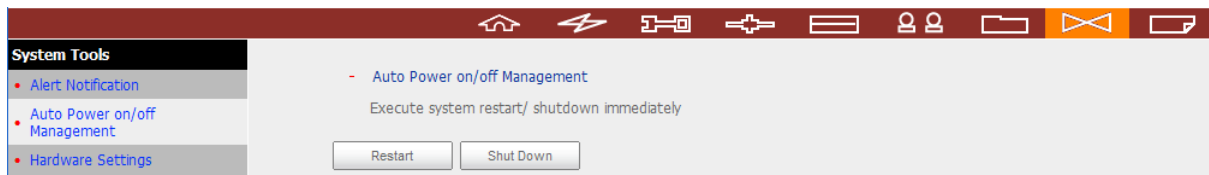
## Chapter 13 NAS Maintenance

### 13.1 Restart/ Shut down Server

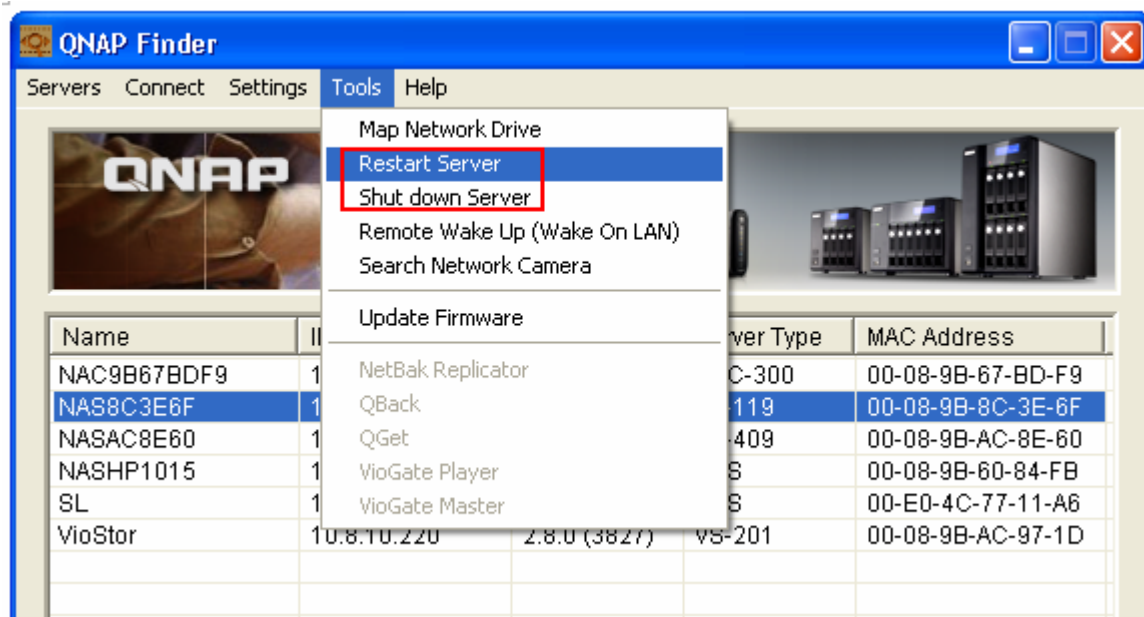
Follow the steps below to restart or shut down the NAS.

1. Login the NAS. Go to "System Tools" > "Auto Power on/off Management".
2. Click "Restart" to reboot the server or "Shut Down" to turn off the server.

To force shut down the NAS server, press the power button for more than 10 seconds. The server beeps once and shuts down immediately.



You can use the Finder to restart or shut down the server (admin access required).



## 13.2 Reset Administrator Password and Network Settings

To reset the administrator password and network settings of NAS,

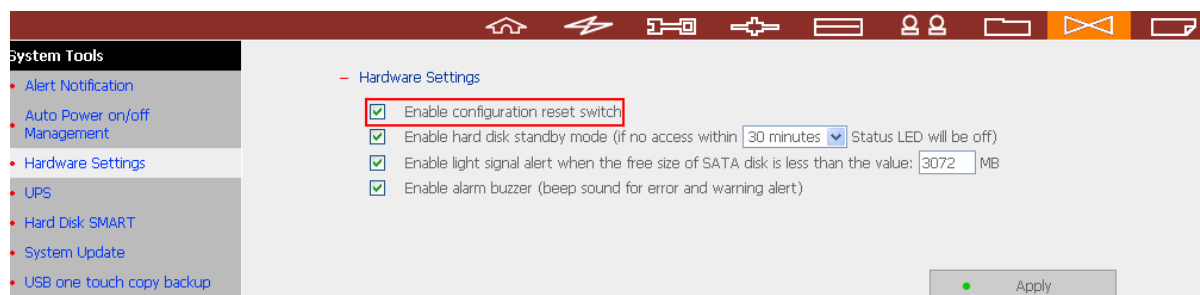
1. Press the reset button of the NAS for a few seconds. A beep sound will be heard.

The following settings are reset to default:

- a. System admin password: admin
  - b. Network Settings/ TCP/IP Configuration: Obtain IP address settings automatically via DHCP
  - c. Network Settings/ TCP/IP Configuration: Disable Jumbo Frame
  - d. Network Setting/ System Port Management: 8080 (system service port)
  - e. System Tools/ IP Filter: Allow all connections
2. Login the NAS with the default user name and password:

Default user name: **admin**  
Password: **admin**

**Note:** To reset the system by the reset button, the option "Enable configuration reset switch" in Hardware Settings must be activated.



### 13.3 Disk Failure or Malfunction

When you encounter disk malfunction or failure, please do the following:

1. Record the malfunction status or error messages shown in Event Logs.
2. Stop using the failed NAS and turn off the server.
3. Contact customer service for technical support.

**Note:** The NAS must be repaired by professional technicians, do not try to repair the server yourself.

Please back up any important files or folders to avoid potential data loss due to disk crash.

### 13.4 Power Outage or Abnormal Shutdown

In case of power outage or improper shutdown of the NAS, the system will resume to the state before it is shut down. If your server does not function properly after restart, please do the following:

1. If the system configuration is lost, configure the system again.
2. In the event of abnormal operation of the server, contact customer service for technical support.

To avoid the above situations, please back up your data periodically and make sure you have done the following:

- Follow the instructions described in Chapter 13.1 to restart or shut down the server.
- If there is an anticipated power outage, back up all important data and turn off the server properly until power supply is resumed.

### 13.5 System Software Abnormal Operation

When the system software does not operate properly, the NAS automatically restarts to resume normal operation. If you find the system restarts continuously, it may fail to resume normal operation. In this case, please contact the technical support immediately.

### 13.6 System Temperature Protection

When the system temperature exceeds 70°C (158°F), the system shuts down automatically for hardware protection.

## Technical Support

QNAP provides dedicated online support and customer service via instant messenger.

You can contact us by the following means:

Online Support: <a href="http://www.qnap.com/">http://www.qnap.com/</a> MSN: <a href="mailto:q.support@hotmail.com">q.support@hotmail.com</a> Skype: qnapskype Forum: <a href="http://forum.qnap.com/">http://forum.qnap.com/</a>
--

### Technical support for North America users:

E-mail: <a href="mailto:support@usa.ieiworld.com">support@usa.ieiworld.com</a> 1-800 Hotline: 866-276-6754 ext.110 Address: 168 UNIVERSITY PARKWAY POMONA, CA 91768-4300
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Version 3, 29 June 2007

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## Preamble

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Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

## **TERMS AND CONDITIONS**

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### **0. Definitions.**

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“The Program” refers to any copyrightable work licensed under this License. Each licensee is addressed as “you”. “Licensees” and “recipients” may be individuals or organizations.

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To “convey” a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays “Appropriate Legal Notices” to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

## **1. Source Code.**

The “source code” for a work means the preferred form of the work for making modifications to it. “Object code” means any non-source form of a work.

A “Standard Interface” means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The “System Libraries” of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A “Major Component”, in this context, means a major essential component (kernel, window system, and so on) of the specific operating

system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The “Corresponding Source” for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

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